



# THE UNIVERSITY *of* EDINBURGH

This thesis has been submitted in fulfilment of the requirements for a postgraduate degree (e.g. PhD, MPhil, DClinPsychol) at the University of Edinburgh. Please note the following terms and conditions of use:

- This work is protected by copyright and other intellectual property rights, which are retained by the thesis author, unless otherwise stated.
- A copy can be downloaded for personal non-commercial research or study, without prior permission or charge.
- This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the author.
- The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author.
- When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given.

A STUDY OF THE GOSPELS IN CODEX ALEXANDRINUS:  
CODICOLOGY, PALAEOGRAPHY, AND SCRIBAL HANDS

BY

W. ANDREW SMITH

A DISSERTATION SUBMITTED TO  
THE FACULTY OF THE DIVINITY SCHOOL  
IN CANDIDACY FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

BIBLICAL STUDIES

UNIVERSITY OF EDINBURGH

2013

Copyright © 2013 W. Andrew Smith

All rights reserved

This is to certify that the work contained within has been composed by me and is entirely my own work. No part of this thesis has been submitted for any other degree or professional qualification.

Signed:

19 February, 2013

## CONTENTS

Acknowledgments.....	v
Abbreviations .....	vii
Abstract .....	ix
Chapter 1 – Introduction .....	1
Objective .....	2
Overview of the Following Chapters .....	4
Manuscript Page Notation.....	7
Chapter 2 – Codex History.....	9
Codicology and the History of Codex Alexandrinus .....	9
1627 to Present.....	10
Codex History Prior to 1627 .....	15
Chapter 3 – Codicology .....	43
The Codex .....	46
Materials .....	47
Composition and Binding .....	49
Dimensions and Formatting.....	59
Contents .....	74
Ordering of the New Testament Books .....	87
Numbering .....	92
Closing Remarks on the Codicology of Alexandrinus .....	120
Chapter 4 – Palaeography and Paratextual Features of the Gospels.....	123
The Hands .....	124
Use of Color.....	148
Superscriptions, Subscriptions, and Tailpiece Designs .....	154
Eusebian Apparatus .....	169
<i>Kephalaia</i> and <i>Titloi</i> .....	196
Conclusion .....	215



Chapter 5 – Scribes .....	218
Overview of the Scribal Hands .....	218
Unit Delimitation .....	229
<i>Nomina Sacra</i> .....	268
Other Abbreviations and Ligatures .....	274
Orthography .....	275
Conclusions.....	298
Chapter 6 – Conclusion.....	302
Creation of the Codex .....	302
The Eusebian Apparatus and Use of Numbers .....	304
Palaeography and Statistical Analysis .....	305
Updating the Alexandrinus Knowledge Base .....	306
Final Words.....	310
Appendix A (Tables of Concordance) .....	312
Appendix B (Orthographic Data).....	350
Appendix C (Statistical Analysis).....	369
Appendix D (Eusebian Apparatus Data).....	376
Appendix E (Unit Delimitation Data).....	388
Works Cited .....	406

## ACKNOWLEDGEMENTS

When I was exploring the possibility of pursuing PhD work, I met with Prof. Larry Hurtado for the first time at the SBL Annual Meeting in San Diego in 2007. It was apparent to me from that initial meeting that I would enjoy working under his direction, and the experience met my expectation. Prof. Hurtado provided me with an excellent model for delivering helpful, critical feedback on research and writing. I have always felt assured that when my written work had passed his inspection it could be presented with great confidence. Additionally, his congeniality, humor, and encouragement made the dissertation process as painless as such an intense labor can be.

In manuscript studies one may find oneself wading into deep and uncharted waters. I would like to thank those who shared their wisdom and experience when the waters seemed darkest: Prof. Pat Easterling at Cambridge University, for her time and interest; Dr. Christian Lange at the University of Edinburgh, for his skills in Arabic; Dr. Paul Parvis at the University of Edinburgh, for his expertise in neo-Latin; and Dr. Roger Woodard at North Carolina State University and Valerie H. Smith, MStat, for their expertise and guidance in statistical analysis. I am grateful to the scholars and staff at Tyndale House for a most productive and encouraging summer of research. Also, for providing me access to manuscript information otherwise unavailable, I would like to thank Dr. Kathleen Doyle and Dr. Philippa Marks at the

British Library. Additionally, I am appreciative of the accommodation provided by the Special Collections librarians at the J. Murrey Atkins Library at the University of North Carolina, Charlotte.

Finally, for her longsuffering patience, love, and support, I would like to thank my wife, Valerie. Without her, this PhD work would have been impossible. She went far beyond the call of spousal love and duty by sharing me with this research, which—all-consuming as it was—often sat at our dinner table as an uninvited phantom.

## ABBREVIATIONS

<i>AJP</i>	<i>American Journal of Philology</i>
<i>BASP</i>	<i>Bulletin of the American Society of Papyrologists</i>
<i>BHS</i>	<i>Biblia Hebraica Stuttgartensia</i>
<i>BNP</i>	<i>Brill's New Pauly: Encyclopaedia of the Ancient World</i> . Edited by H. Cancik et al. Leiden, 2006-2011
<i>CBQ</i>	<i>Catholic Biblical Quarterly</i>
<i>DOP</i>	<i>Dumbarton Oaks Papers</i>
<i>ExpTim</i>	<i>Expository Times</i>
<i>JBL</i>	<i>Journal of Biblical Literature</i>
<i>JGRChJ</i>	<i>Journal of Greco-Roman Christianity and Judaism</i>
<i>JR</i>	<i>Journal of Religion</i>
<i>JSNT</i>	<i>Journal for the Study of the New Testament</i>
<i>JTS</i>	<i>Journal of Theological Studies</i>
LL	Lower left
LM	Lower middle
LR	Lower right
LXX	Septuagint
MT	Masoretic Text
NA <sup>27</sup>	<i>Novum Testamentum Graece</i> , Nestle-Aland, 27th edition
<i>NovT</i>	<i>Novum Testamentum</i>
NT	New Testament
<i>NTS</i>	<i>New Testament Studies</i>
<i>Orig.</i>	<i>Isidori Hispalensis Episcopi Etymologiarum Sive Originum Libri XX</i>
OT	Old Testament
PW <sup>2</sup>	Pauly, A. F. <i>Paulys real-encyclopädie der classischen Altertumswissenschaft</i> , Zweite Reihe. Stuttgart, 1914-
RF <sup>NT</sup>	<i>The Codex Alexandrinus (Royal MS. 1 D v-vii) in Reduced Photographic Facsimile: New Testament and</i>

	<i>Clementine Epistles</i>
<i>RF<sup>OT</sup></i>	<i>The Codex Alexandrinus (Royal MS. 1 D v-vii) in Reduced Photographic Facsimile: Old Testament</i>
SBL	Society of Biblical Literature
SD	Standard Deviation
<i>SE</i>	<i>Studia evangelica</i>
<i>SPap</i>	<i>Studia papyrologica</i>
<i>st. n.</i>	<i>stilo novo</i>
<i>st. v.</i>	<i>stilo vetere</i>
<i>SwJT</i>	<i>Southwestern Journal of Theology</i>
UL	Upper left corner of a folio
UR	Upper right corner of a folio
ZAW	<i>Zeitschrift für die alttestamentliche Wissenschaft</i>
ZPE	<i>Zeitschrift für Papyrologie und Epigraphik</i>

## ABSTRACT

The fifth-century manuscript known as the Codex Alexandrinus contains the entirety of the Greek Old and New Testaments and is a landmark in the history of the Bible. Though Alexandrinus represents a primary witness to the biblical text, no modern palaeographical or codicological analysis of the manuscript has been performed: the most in-depth studies of the codex pre-date the great papyrological finds of the 20th century. By executing both palaeographical and codicological analyses of the manuscript in light of a modern understanding of the textual history of the Bible and of Hellenistic Greek, and by additionally introducing statistical analysis into what has traditionally been a subjective field of research, this dissertation processes the textual and paratextual data of the manuscript to a degree previously unattained.

The focus of the analysis is on the Gospels, which are quite unique in Alexandrinus: they stand at the headwaters of the Byzantine text form; they contain the earliest extant implementation of the Old Greek chaptering system; and the interaction between the unit delimitation and the Eusebian Apparatus in the Gospels is unique among the great uncial manuscripts. However, the analyses extend to both the Old and New Testaments to provide a context in which to study the Gospels.

Among the discoveries made in this dissertation, this study overturns the view that a single scribe was responsible for copying the canonical New Testament books and demonstrates that the orthography of the Gospels can no longer be used to

argue for the Egyptian provenance of the codex. As the first in-depth study of unit delimitation in the Gospels of Alexandrinus, this work reveals the complex relationship between the paragraphing system, the chaptering structure, and the incorporation of the Eusebian Apparatus from a separate exemplar. Finally, one result of the examination of the Eusebian Apparatus introduces the *cascading error* as a newly identified category of scribal error.

## CHAPTER I

### INTRODUCTION

The Codex Alexandrinus (hereafter referred to simply as “Alexandrinus”) has a colorful history and obscure origins. The manuscript has been known by different names and labels: It has also been referred to as Codex Regius and Thecla’s Bible;<sup>1</sup> its shelf mark in the British Library is MS Royal 1. D. V-VIII; it was abbreviated to A by Brian Walton and signified with δ 4 by Hermann von Soden; its modern Gregory-Aland designation is A or 02. In the Gospels, Alexandrinus stands at the headwaters of the Byzantine text type and contains the earliest extant example of the Old Greek chaptering system. It is one of the three oldest complete Greek Bibles (including the 4th century codices Codex Vaticanus and Codex Sinaiticus) and is a primary witness to the biblical texts. The codex has been brutalized by binders (who have sheared off some of the marginal features), it has survived at least one fire, it has suffered the loss of a number of pages, and with an improperly prepared writing surface its ink is slowly eating through some of its pages and turning them into lacework. Despite its dangerous journey, a sizable portion of this valuable codex remains available for scholarly investigation today.

---

<sup>1</sup> Scot McKendrick, “The Codex Alexandrinus: Or the Dangers of Being a Named Manuscript,” in *The Bible as Book: The Transmission of the Greek Text*, ed. Scot McKendrick and Orlaith O’Sullivan (London: The British Library and Oak Knoll Press, 2003), 2.



## Objective

Compared to Codex Sinaiticus and Codex Vaticanus, remarkably limited research has been performed on Alexandrinus since its acquisition by England in 1627. Although collations, critical editions, and facsimile copies of the manuscript were produced between the 1700s and the early 1900s (the reduced facsimile of the codex was begun in 1909 and completed in 1957), no comprehensive study of the document has been performed in the last century. As David Parker laments in his recent *Introduction to the New Testament Manuscripts and Their Texts*, there is a “surprisingly sparse” bibliography for Alexandrinus, and the text “deserves a new full-scale study.”<sup>2</sup> Because of this need for a modern analysis of the codex, the objective of this dissertation is to describe and analyze the physical, paratextual, and textual features of the Gospels in Alexandrinus. Historically, studies of this kind have primarily involved qualitative methods of processing manuscript data; here, with little precedent, I introduce quantitative data analysis where possible, in order to bolster subjective conclusions with objective evidence. While the focus of this study will remain on the Gospels, analysis of the physical features of the codex and the paratextual features that run throughout the manuscript requires examination of the entire codex insofar as to establish a context for the data.

Because access to this fragile manuscript is severely limited, I have performed the bulk of this analysis making use the facsimiles produced by the British Museum in the 19th and 20th centuries. The *Facsimile of the Codex Alexandrinus*,<sup>3</sup> produced under the direction of E. Maunde Thompson from 1879–1883 and issued in

---

<sup>2</sup> D. C. Parker, *An Introduction to the New Testament Manuscripts and Their Texts* (Cambridge: Cambridge University, 2008), 72.

<sup>3</sup> *Facsimile of the Codex Alexandrinus* (London: Trustees of the British Museum, 1879–1883).

four volumes, is an excellent, full-scale facsimile suitable for physical measurements of paratextual features in the codex. The subsequently produced reduced facsimile,<sup>4</sup> issued in four volumes (in 1909, 1915, 1930, and 1957), provides a worthwhile alternate look at the manuscript; while the full-size *Facsimile* offers a better view of the manuscript edges (e.g., the Arabic foliation is captured far more completely in the full-size images), the different photographic technique used for the *Reduced Facsimile* filters out some of the ambient image “noise” present in the *Facsimile* images.

I petitioned the British Library to view the manuscript in person, in hopes of overcoming the limitations of black-and-white facsimiles produced at least half a century ago. To my delight, near the conclusion of this work, I received word from the British Library that the manuscript was in the process of being conserved and that digital images would be made available in the near future. In December of 2012 the British Library made freely available their color, digital images of the NT of Alexandrinus on-line,<sup>5</sup> which has provided the scholarly world with a wealth of information unavailable apart from physical examination of the codex. Portions of the manuscript that were too dark to read in facsimile form (e.g., where chemical reagents were applied to the Clementine Epistles) are quite legible in the digital images, which are of suitably high quality. Additionally, the use of color by the scribes is finally available to anyone wishing to study the manuscript. Wherever possible I have updated my earlier work with information available from the digital images; I look forward to the possibility of the British Library making available

---

<sup>4</sup> *The Codex Alexandrinus (Royal MS. 1 D. V-VIII) in Reduced Photographic Facsimile* (London: Trustees of the British Museum, 1909–1957). Hereafter the NT and OT volumes are referred to using  $RF^{NT}$  and  $RF^{OT}$ , respectively.

<sup>5</sup> [http://www.bl.uk/manuscripts/FullDisplay.aspx?ref=Royal\\_MS\\_1\\_d\\_viii](http://www.bl.uk/manuscripts/FullDisplay.aspx?ref=Royal_MS_1_d_viii)

images of the OT in digital form as well. Where physical examination would be required to form a conclusion I have so noted the research limitation and hope that an autopsy of the manuscript may be possible in the future.

### **Overview of the Following Chapters**

The history of Alexandrinus, insofar as it can be reconstructed, is the subject of Chapter 2. After 1627, when the manuscript was delivered to England as a gift to the throne, the history of Alexandrinus is well recorded. Prior to that date, however, the origin and travels of the codex must be ascertained by less direct means. A number of interventions in the text, written by a variety of hands at different times and places, provide valuable clues as to the travels of the manuscript and its function for those who possessed it. Inscriptions made by previous owners—such as Athanasius the Humble and Cyril Lucar, the Patriarch of Constantinople—have been particularly useful in tracing the manuscript's path over the last centuries.

In Chapter 3 I examine the codicological features of the entire manuscript in order to contextualize those features encountered specifically in the Gospels. Codicological work of this nature serves to study the manuscript as a physical or archaeological artifact. Books manufactured prior to the advent of the printing press are far more than simply the text they contain; their design, construction, and paratextual feature set are all a product of the choices made by their creators and by those who handled and modified them. This chapter contains a detailed look at the materials, the manufacture (binding and quire structure), and reconfigurations of the manuscript. Statistical analysis of the physical layout is used to confirm less objective palaeographical conclusions described in Chapter 4. And a 14th-century

intervention (Arabic folio numeration) proves useful in determining the extent of the lacunae encountered in the present-day manuscript. Two lacunae (a missing leaf before 1 Maccabees and a second missing leaf before 1 Clement) are identified for the first time in modern scholarship using the 14th-century numeration.

Following the inquiry into the manuscript's codicological features, in Chapter 4 I provide a palaeographical analysis of the Gospels. In light of the disagreement encountered among the historical conclusions regarding the palaeography of the codex, this work (supported by the codicological calculations of Chapter 3) puts to rest the dispute regarding the number of hands encountered in the Gospels (and more broadly in the New Testament). The scope of this palaeographical work is broad-based, handling not only typical palaeographical elements (such as letter forms, ruling, etc.) but also: the use of color in the manuscript; the unique tailpiece art at the end of each biblical book; the implementation of the Eusebian Apparatus; and the instantiation of the Old Greek chaptering system in the Gospels. In the study of the Eusebian Apparatus I introduce the idea of the *cascading error* in the reproduction of number lists and explain how the cascading errors found in the Eusebian Apparatus of Alexandrinus indicate that the Apparatus was copied from a separate exemplar. To date, this is the most comprehensive palaeographical study of Alexandrinus.

In Chapter 5 I consider the historical conclusions regarding the delineation of scribal hands in the manuscript; with those historical perspectives in mind, I then tie together the conclusions from Chapter 3 (the codicological analysis) and Chapter 4 (the palaeographical analysis) in order to determine that Kenyon's assertion that there were three hands at work in the canonical NT books of Alexandrinus was

correct. Additionally, I examine the habits of each of the hands regarding unit delimitation and use of *nomina sacra* in the Gospels—paratextual elements that are both inherently interpretive in nature. I then perform an exhaustive analysis of the orthographic variations in the Gospels. For the last century and a half the orthography of the manuscript has been described as Alexandrian/Egyptian based on the conclusions of scholars pre-dating the work of Grenfell and Hunt; I use the data from the Gospels to challenge those conclusions in light of more recent orthographic studies. As a result, the orthography of Alexandrinus (as represented in the Gospels) can no longer be used to posit an Egyptian origin for the manuscript.

Finally, in Chapter 6, I step back from the in-close analyses of the preceding chapters and make some observations regarding how those analyses fit together and provide clues regarding the production and use of Alexandrinus. These observations include: the discarding of outdated conclusions regarding the manufacture of Alexandrinus, how the analyses of the preceding chapters provide some details regarding the creation of the codex, the disregard for accuracy in the transmitting of numbers in paratextual features (in Alexandrinus but possibly in Greek biblical manuscripts in general), and the usefulness of statistical analysis in future codicological analyses.

The bulk of the existing scholarly work on Alexandrinus is scattered across the 17th to 19th centuries, in studies that are often brief and incomplete, conducted without the benefit of the wealth of conclusions resulting from modern papyrological investigation. As a result of this codicological and palaeographical study of the Gospels in Alexandrinus, the similarities and differences in both of the hands responsible for copying the Gospels are finally articulated, accompanied by a

thorough analysis and presentation of the relevant data; tangentially, the distinctive differences of the hand that copied the Apocalypse are also briefly examined. My analyses provide details regarding the history and origin of this important codex, despite the remaining elusive nature of the manuscript's provenance. The results are not only useful to the work of textual criticism and more general manuscript studies, but the methodology represents a next step in the burgeoning field of codicology.

### **Manuscript Page Notation**

When working from the facsimile images of Alexandrinus, the folio numeration created by Patrick Young, which he wrote on the right-facing side of each leaf of the manuscript, is of limited use. His numeration was not without errors, he restarted the page numeration in the NT, and he did not account for every page in the current, four-volume configuration of the codex. For this reason I have introduced an “absolute” numbering system to uniquely indicate any location within the manuscript. To identify specific locations within the current, four-volume text of Alexandrinus, the descriptive method used is formatted in modified Backus-Naur Form as follows:

`Position ::= V<volume number>.F<folio number>{a|b}[.c<column>][.r<row>]`

where the “a” or “b” following a folio number indicates the right-hand page (“a”) or left-hand page (“b”) of an opening and column and row numbers are optional. Examples include:

V1.F20a	volume 1, folio 20, right page of opening
V2.F22b.r5	volume 2, folio 22, row (or line) 5, left page of opening
V4.F25a.c1.r15	volume 4, folio 25, right page of opening, column 1, row 15

In Appendix A (the Tables of Concordance), the entire codex is indexed according to both Young's page numeration and the absolute numbering system. The digital images of Alexandrinus available on-line through the British Library are organized according to absolute numbering as well, using *r(ecto)* and *v(erso)* notation rather than "a" and "b"; thus, V4.F12a in this dissertation corresponds with the British Library's f.12r.<sup>6</sup> When referring to a collection of "a" sides of leaves the terms "right pages" or "right-facing pages"<sup>7</sup> are used since consecutive "a" sides would include both hair-side and flesh-side folios; likewise, a collection of "b" sides of leaves will be referred to as "left pages" or "left-facing pages."

---

<sup>6</sup> The terms *recto* and *verso* are properly applied to papyrus manuscripts and thus are not applicable to the parchment leaves of Alexandrinus.

<sup>7</sup> When the codex is opened, the "a" side of a leaf appears to the right.

## CHAPTER II

### CODEx HISTORY

#### **Codicology and the History of Codex Alexandrinus**

When manuscripts are studied only for the texts they contain, a wealth of knowledge about the history of those manuscripts is ignored. It is the “textual setting”<sup>1</sup> that reveals to the careful observer much about the purpose and use of the manuscript, both from the time of its creation and from its later utilization. Much like an archaeological exploration, the study of the physical setting of a manuscript reveals an accumulation of historical strata that speak to its cultural and intellectual history.<sup>2</sup> As Boyle observes, to rightly handle a text is to learn the tradition of the text:

For it is an inescapable fact that the only way in which we know of the text we are editing—even when it has had many editions—is through the codices that carry it. And unless these carriers are examined as thoroughly as possible, one is never going to be in a position to subject that text as it is carried by the codices to anything approaching a critical analysis... Codicology is a history of the fortunes not of a text as text, but of a text as it is carried by codices. It is a simple and necessary recognition of the fact that texts have survived because of codices, and that each codex in turn carries text in its own unique fashion.<sup>3</sup>

As with many biblical manuscripts, the history of Alexandrinus as revealed by codicological examination has been largely ignored, and this has been to the

---

<sup>1</sup> Boyle’s use of the phrase “physical setting” seems most agreeable, such that “‘physical setting’ is probably a more useful term than ‘physical description’” because it is more comprehensive than a mere description of dimensions, binding, and materials (Leonard E. Boyle, “‘Epistolae venerunt parum dulces’: the Place of Codicology in the Editing of Medieval Latin Texts,” in *Editing and Editors: a Retrospect*, ed. Richard Landon [New York: AMS, 1988], 35).

<sup>2</sup> This useful word picture is borrowed from Raymond Clemens and Timothy Graham, *Introduction to Manuscript Studies* (Ithaca: Cornell University Press, 2007), 48.

<sup>3</sup> Boyle, 33, 46.



detriment of its students. A number of inscriptions in the pages of Alexandrinus were made after its creation, and these interventions speak of the travels, ownership, and use of the codex through the centuries. The history of the codex after 1627, when it was made a gift to England, is relatively well known; this is summarized in the following section. In the subsequent section, several of the interventions made in the manuscript are examined to construct some of the history of the codex prior to 1627. Other miscellaneous interventions that support this constructed history (such as the Arabic folio numeration) are discussed in detail in later chapters.

### 1627 to Present

The earliest *certain* placement of Alexandrinus is in 1627, when the Codex was given as a gift to King Charles I of England by the Patriarch of Constantinople (1621–1638), Cyril Lucar. The English adventurer and ambassador, Sir Thomas Roe, fostered a friendly and mutually beneficial relationship with the Patriarch by aiding him against the machinations of the Latin Church at a time when the ecclesiastical system of the Orthodox Church suffered from corruption under the Ottoman Empire; in return for Roe's aid, the Patriarch was pressured to supply England with ancient books and works of art.<sup>4</sup> As a result, among the ancient works that were delivered to England, Alexandrinus was to be given as a gift to King James I in 1625. But, for reasons not revealed by Roe's letters, the transfer of the Codex to England was delayed until it was finally presented to King Charles I on New Year's Day, 1627.

---

<sup>4</sup> Matthew Spinka, "Acquisition of the Codex Alexandrinus by England," *JR* 16, no. 1 (January 1936): 12.

The Codex is presumed to have been in the possession of Cyril Lucar during his years as Patriarch of Alexandria (1602–1621), later residing with him in Constantinople (thus, the popular name of the Codex derives from its supposed “origin” in the Alexandrian see),<sup>5</sup> but the location of the Codex prior to its acquisition by Cyril Lucar is uncertain.<sup>6</sup>

The first mention of Alexandrinus in Roe’s correspondence occurs in a letter to the Earl of Arundell, sent from Constantinople on 12 January, 1624 (*st. v.*).<sup>7</sup> Discussing antiquities he hoped to acquire from Cyril Lucar, the Patriarch of Constantinople, Roe mentioned the Codex as the first of the texts he had received from Lucar:

By his meanes, I may procure some books; but they are indeed Greeke to mee: one only he hath giuen mee, for his majestie, with exprefs promise to deliuer yt; being an autographall bible intire, written by the hand of Tecla the protomartyr of the Greekes, that liued in the tyme of St. Paul; and he doth auerr yt to bee true and authentically, of his owne writing, and the greateft antiquitye of the Greeke church.<sup>8</sup>

---

<sup>5</sup> This association began very early. Walton’s polyglot, for example, introduces the text of this manuscript as originating in Alexandria (Brian Walton, *Biblia sacra polyglotta* [London: Thomas Roycroft, 1653]). Additionally, the (quite massive) polyglot produced by Walton was the first to note Alexandrinus’ variant readings and the first to signify the Codex with the letter “A” (Eldon J. Epp and Gordon D. Fee, “Decision Points in New Testament Textual Criticism,” in *Studies in the Theory and Method of New Testament Textual Criticism*, SD 45 [Grand Rapids: Eerdmans, 1993], 19). Wettstein is credited with the more general practice of using letter designations for multiple manuscripts (e.g., Lyle O. Bristol, “New Testament Textual Criticism in the Eighteenth Century,” *JBL* 69, no. 2 [June 1950]: 106).

<sup>6</sup> Spinka noted that Roe indicates in his correspondence that Cyril transferred an Arabic manuscript from Alexandria to Constantinople “and consequently it is not unlikely that he would not have scrupled to remove [Alexandrinus] also” (26). This does seem reasonable.

<sup>7</sup> At that time the Julian calendar was still widely used despite adoption of the Gregorian calendar in Catholic nations. Notation of “old style” (*stilo vetere*) and “new style” (*stilo novo*) dates indicate whether the Julian or Gregorian calendars, respectively, are being used.

<sup>8</sup> Thomas Roe, Sir, *The negotiations of Sir Thomas Roe, in his embassy to the Ottoman porte, from the year 1621 to 1628 inclusive: containing A great Variety of curious and important Matters, relating not only to the Affairs of the Turkish Empire, but also to those of the Other States of Europe, in that Period: his correspondences with the most illustrious Persons, for Dignity or Character; as with the Queen of Bohemia, Bethlem Gabor Prince of Transylvania, and other Potentates of different Nations, &c. And many useful and instructive particulars, as well in relation to Trade and Commerce, as to Subjects of Literature; as Antient Manuscripts, Coins, Inscriptions, and other Antiquities* (London: Samuel Richardson, at the expence of the Society for the Encouragement of Learning, 1740), 335.

What Roe reported regarding the origins of Alexandrinus—written by Thecla the protomartyr, living at the time of the apostle Paul—is in conflict with a description he provided in later correspondence. For, writing to the Archbishop of Canterbury (George Abbot) on 17 February, 1626 (*st. v.*), Roe related Lucar’s testimony regarding the origins of the Codex as such:

The patriarch also, this new yeares tyde, sent mee the old Bible formerly presented to his late majestie, which he now dedicated to the kyng, and will send with yt an epistle, as I thincke he has signified to your grace, at least I will presume to mention it to his majestie. What estimation it may be of, is above my skill; but he vales yt, as the greatest antiquity of the Greeke church. The letter is very fayre, a character that I have neuer seene. It is entyre, except the beginning of St. Matheiw. He doth testefye vnder his hand, that it was written by the virgin Tecla, daughter of a famous Greeke, called Αβγιεριενος, who founded the monestary in Egypt vpon Pharoas tower, a deuout and learned mayd, who was persecuted in Afa, and to whom Gregory Nazianzen hath written many epistles. At the end wherof, vnder the same hand, are the epistles of Clement. She dyed not long after the councell of Nice. The booke is very great, and hath antiquity enough at sight. I doubt not his majestie will esteeme it for the hand by whom it is presented.<sup>9</sup>

In this second account, Roe related that Thecla was the daughter of a Greek named Abgierienos who founded a monastery in Egypt, that she was a correspondent of the fourth century theologian Gregory of Nazianzus (c. AD 330–390), and that she died “not long after” the Council of Nicea (AD 325). Somehow the Bible had returned to the hands of Lucar, because Roe mentioned that Lucar had again sent it to him to present to King Charles (“his late majesty,” King James, had died before the gift could be given); regardless, the details of the manuscript’s history were significantly different than the account given to the Earl of Arundell. Whether Roe confused the details of the story told to him by Lucar in one or both of the letters or Lucar changed his story is unknowable.<sup>10</sup>

---

<sup>9</sup> Roe, 618.

<sup>10</sup> Spinka suggests that Roe “expanded” Lucar’s origins account since he learned of the Thecla story from Lucar’s letter (“he doth testefye under his own hand”) and that letter contains none of Roe’s other details (28).

Possibly because of the delay in sending Alexandrinus to the English king, there is disagreement over the date in which the Codex was finally delivered; the date is variously recorded as 1626,<sup>11</sup> 1627,<sup>12</sup> 1628,<sup>13</sup> and 1629.<sup>14</sup> But Roe's letter to George Abbot indicates that the Codex was "dedicated" to the king on New Year's Day, 1627 (*st. n.*). Once in England, the manuscript came under the care of the Royal Librarian, Patrick Young (also known by the Latinized name Patricius Junias). It is most likely Young who ordered the binding of the manuscript into four volumes and it was Young who placed many interventions in the text, marking off modern chapters and numbering the leaves (see Chapter 3 for details). During the civil war in England (which commenced in 1642), Young retired and was allowed to take Alexandrinus and numerous other library holdings with him; despite an attempt to retrieve the books after Young's death in 1652, the books may have remained with his family for another dozen or so years.<sup>15</sup> Eventually, Alexandrinus, among many

---

<sup>11</sup> Review of *Pamphlet on the Codex Alexandrinus*, by C. H. Hoole, *Academy* 40 (July-December 1891): 73.

<sup>12</sup> Epp, 18; C. A. Phillips, "The Codex Sinaiticus and the Codex Alexandrinus," *ExpTim* 51 (1939–1940): 301; Scot McKendrick, "The Codex Alexandrinus: Or the Dangers of Being a Named Manuscript," in *The Bible as Book: The Transmission of the Greek Text*, ed. Scot McKendrick and Orlaith O'Sullivan (London: The British Library and Oak Knoll Press, 2003), 1.

<sup>13</sup> F. H. Scrivener, *Six Lectures on the Text of the New Testament* (Cambridge: Deighton, Bell, and Co, 1875), 50; Frederic Kenyon, Sir, *The Story of the Bible: A Popular Account of How it Came to Us* (London: John Murray, 1936), 56; F. J. Foakes Jackson and K. Lake, *The Beginnings of Christianity* (London: Macmillan, 1926), 3:li; Silva Lake, *Family II and the Codex Alexandrinus: The Text According to Mark* (London: Christophers, 1937), 8; Kurt Aland and Barbara Aland, *The Text of the New Testament*, trans. Erroll F. Rhodes (Grand Rapids: Eerdmans, 1987), 109; Gerard Mussies, *The Morphology of Koine Greek As Used in the Apocalypse of St. John: A Study in Bilingualism* (Leiden: Brill, 1971), 20. Mussies asserts, in addition, that "in all likelihood the codex was brought to London in 1621 by Cyrillus Lucaris, the last patriarch of Alexandria, who gave it as a present to king Charles I in 1628"; Mussies' description of the manuscript is not without its errors (e.g., claiming that it contains Barnabas and Hermas in addition to the Clementine Epistles), so this assertion likely represents a misunderstanding of Scrivener.

<sup>14</sup> B. H. Cowper, *Codex Alexandrinus. H KAINH ΔΙΑΘΗΚΗ. Novum Testamentum graece ex antiquissimo codice alexandrino a C. G. Woide olim descriptum: ad fidem ipsius codicis* (London: David Nutt and Williams & Norgate, 1860), iii.

<sup>15</sup> James P. Carley, ed., *The Libraries of King Henry VIII*, *Corpus of British Medieval Library Catalogues* 7 (London: The British Library, 2000), lxxxvii–lxxxix; *A Biographical Dictionary of Eminent Scotsmen*, s.v. "Young, Patrick."

other books, was returned to the Royal Library, though the exact date of its return is unknown.

Greek and classics scholar Richard Bentley (1662–1742) was appointed the King’s Librarian in 1694, at which time Alexandrinus came under his care. Bentley had become interested in New Testament textual criticism and produced notes for a critical edition of the text that was never published; among his available witnesses, he considered Alexandrinus “the oldest and best now in the world.”<sup>16</sup> Bentley, who undertook the construction of a new royal library after deciding that the existing facilities were “not fit to be seen,” kept Alexandrinus in his own rooms at St. James’ “that persons might see it without seeing the library.”<sup>17</sup> However, after Alexandrinus found a home in the completed library, the world of biblical scholarship nearly saw the loss of the precious manuscript. In 1731, at age sixty-nine, Bentley rescued Alexandrinus from a fire at the library, located at Ashburnham House, Westminster; an eyewitness reported seeing Bentley rushing out of the burning building “in his night-gown and his great wig, with the most precious of his charges, the Alexandrine manuscript of the Greek Bible, under his arm.”<sup>18</sup>

Shortly after the British Museum was established in 1753, King George II transferred the private royal library—including Alexandrinus—to the Museum in 1757. Alexandrinus was on display in the Manuscript Room of the British Museum

---

<sup>16</sup> William Aldis Wright, “A Note in the Codex Alexandrinus,” *Academy* 7 (January/June 1875): 401.

<sup>17</sup> R. C. Jebb, *Bentley* (London: Macmillan and Co, 1882), 37.

<sup>18</sup> Jebb, 160; cf. Adam Fox, *John Mill and Richard Bentley* (Oxford: Basil Blackwell, 1954), 125. Fox includes an eyewitness letter detailing the damage to the library (149–150). The fire at Ashburnham House was a great disaster, destroying many of the Cotton manuscripts and, as the Report of the House of Commons Committee, 9 May 1732, states: “Several entire presses, with the books in them, were also removed, but... several of the backs of the presses being already on fire, they were obliged to be broke open, and the books, as many as could be, thrown out of the windows” (Thomas S. Pattie, “Creation of the Great Codices,” in *The Bible as Book: The Manuscript Tradition*, ed. John L. Sharpe III and Kimberly Van Kampen [London: The British Library and Oak Knoll Press, 1998], 69).

until 1973, when it was moved to the British Library at St. Pancras. The manuscript currently resides in the Sir John Ritblat Gallery of the Library.

### **Codex History Prior to 1627**

Prior to 1627, the history and provenance of Alexandrinus remains somewhat obscure. The codex was certainly in the hands of Lucar in Constantinople, where he was transferred after being elected to the patriarchate in 1620; prior to that, Lucar had been elected to the patriarchate of Alexandria in 1602.<sup>19</sup> In light of the inscription on V1.F5a (discussed below), it is probable that Lucar brought Alexandrinus with him from Alexandria in 1620 when he made the journey to Constantinople.<sup>20</sup>

However, early data regarding the Lucar's acquisition of Alexandrinus was also provided by Johan Jacob Wettstein, a Swiss chaplain serving in the Dutch army. Wettstein had worked with Richard Bentley and had delivered his collations of various New Testament texts to Bentley in 1716, hoping to encourage the scholar to publish his own edition of the Greek New Testament (which Bentley never completed).<sup>21</sup> Undertaking the work himself, Wettstein discussed in the prolegomena of his 1751 Greek New Testament a history of Alexandrinus that he discovered in familial correspondence. Referring to two letters from his great-uncle, J. R. Wettstein, to Martin Bogdan (dated 14 January and 11 March, 1664), Wettstein revealed that the great uncle reported in his letters the witness of a Cyprian named Matthew Muttis, a deacon of the Patriarch. According to Muttis, the Codex was

---

<sup>19</sup> *Encyclopædia Britannica Online*, s. v. "Cyril Lucaris", accessed February 03, 2013, <http://www.britannica.com/EBchecked/topic/350478/Cyril-Lucaris>.

<sup>20</sup> Frederic George Kenyon, *Handbook to the Textual Criticism of the New Testament*, 2d ed. (London: MacMillan and Co, 1912), 72.

<sup>21</sup> Jebb, 158.

found at Mount Athos (northern Greece), in a monastery that escaped Turkish persecution through paying tribute.<sup>22</sup> Despite assumptions to the contrary, Muttis did not explicitly claim that Cyril Lucar found the manuscript.<sup>23</sup> In the second letter, the elder Wettstein also related that while royal librarian and patristics scholar Patrick Young (1584–1652) was preparing an edition of Clement of Rome from Alexandrinus, a fire at the royal museum burned the book and created scorched lacunae in the text; the manuscript was only saved after being thrown from a window during the fire.<sup>24</sup>

The plausibility of the account given by Muttis will be evaluated after additional data are examined; since the nineteenth century, debate regarding the origins of Alexandrinus and the hands it has passed through over time has centered on a few Arabic and Latin marginalia added to the text at a later date. The inscriptions/interventions that follow will be addressed in turn, noting how each has been interpreted chronologically.

#### Inscription on V1.F4a

On a fly-leaf of the first volume of the text, a Latin note appears in a neat hand reading: “donum datum cubiculo Patriarchali anno 814. Martyrum.”<sup>25</sup> Below this note—and in a second hand, in pencil and in larger text—is written: “+ AD284 = 1098.” As the date of the first note is according to *Anno Martyrum*, it is measured according to the Coptic calendar, which begins with the reign of the Roman emperor

---

<sup>22</sup> J. J. Wettstein, *H KAINH ΔΙΑΘΗΚΗ* (Amsterdam: Officina Dommeriana, 1751–1752), 1:10.

<sup>23</sup> Foakes Jackson and Lake reported Muttis to have stated “that Cyril procured the codex from Mount Athos, where he was in 1612–13” (lii).

<sup>24</sup> Wettstein, *H KAINH ΔΙΑΘΗΚΗ*, 1:10.

<sup>25</sup> Translation: “A gift given to the Patriarchal chamber in the year 814 of the martyrs.”

Diocletian (under whom many, especially Egyptian, Christians were tortured and killed) in AD 284. Thus, this note asserts that the text was given to the Patriarchal cell in AD 1098, as the second hand calculates.

This note has been unanimously determined to be late, added after Alexandrinus passed from Cyril Lucar's hands.<sup>26</sup> In 1826, Baber suspected that the note was written not long after the Codex arrived in England.<sup>27</sup> This inscription is late, estimated by Edward Maunde Thompson in 1881 to be "of the latter part of the 17th century."<sup>28</sup> In 1926, Foakes Jackson and Lake were in agreement with this dating, noting that "the source of this information (or conjecture) is not known."<sup>29</sup> Scot McKendrick pointed out, in 2003, that this inscription was most likely "an inaccurate attempt at deciphering the Arabic note by Athanasius"<sup>30</sup> found on V1.F5.

The note, however, is most certainly in the handwriting of Richard Bentley. I have compared the hand in this inscription against the personal letters of Bentley preserved at the Wren Library at Trinity College, Cambridge (shelf mark R.17.31) and determined that the handwriting in this inscription and in the modern table of contents pages (see Chapter 3) is that of Bentley himself. How Bentley determined that the year of donation was 814 *Anno Martyrum* remains a mystery—one that could

---

<sup>26</sup> On the other side of this leaf (V1.F1b) another modern note in Latin is at the bottom of the page. Written at some point after Paul Colomiès produced an edition of the letters of Clement in 1687, the note refers to Harley MS 823, 2, which is a letter from Cyril Lucar to George (Abbot) the Archbishop of Canterbury. The note reads:

videantur literae ejusdem Cyrilli : Lucar : ad Georgium Episc. Cant.  
Harl : 823, 2. quae extant in Clementis Epistolis ad Corinthios editionis Colomesii Lond.  
 1687 8° pag 344 etc.

The letter is reproduced on pages 336–338 of the 1695 edition of Colomiès' book (Paulus Colomesius, *S. Clementis Epistolae Duæ ad Corinthios* [London: Jacobi Adamson, 1695]).

<sup>27</sup> Henry Hervey Baber, *Vetus Testamentum Græcum e Codice MS. Alexandrino: Prolegomena et notæ* (London: Richard Taylor, 1828), xvii.

<sup>28</sup> *Facsimile of the Codex Alexandrinus* (London: Trustees of the British Museum, 1879–1883), 1:3.

<sup>29</sup> Foakes Jackson and Lake, lii.

<sup>30</sup> McKendrick, "The Codex Alexandrinus," 8.



perhaps be solved through a thorough investigation of his papers—but his hand can now safely be identified as the source of the inscription.

### Inscription from Cyril Lucar

A Latin inscription, written by the Patriarch Cyril Lucar and pasted to a fly-leaf at the front of the volume [V1.F3a] reads:

Liber iste, script<sup>ae</sup> sacrae N. et V. Testam<sup>ti</sup>, prout ex traditione habemus, est scriptus manu Theclae, nobilis feminae Aegyptiae, ante mille et trecentos annos circiter, paulo post concilium Nicenum. Nomen Theclae, in fine libri erat exaratum, sed extincto Christianismo in Aegypto a Mahometanis et libri una Christianorum in similem sunt redacti conditionem. Exstinctum ergo et Theclae nomen et laceratum, sed memoria et traditio recens observat.

✠ Cyrillus Patriarcha Constanti.

This direct testimony from Lucar revealed his understanding of the manuscript's origins, and is in general agreement with the account Roe shared with George Abbot: the text was written by an Egyptian woman named Thecla a short time after the Council of Nicea (about 1300 years prior to 1626). According to Lucar, the name of Thecla originally appeared at the end of the Codex, but was torn from the text as a result of the Muslim annihilation of the Egyptian Christians—yet memory and tradition preserved knowledge of the authorship.

### Inscription on V1.F1b

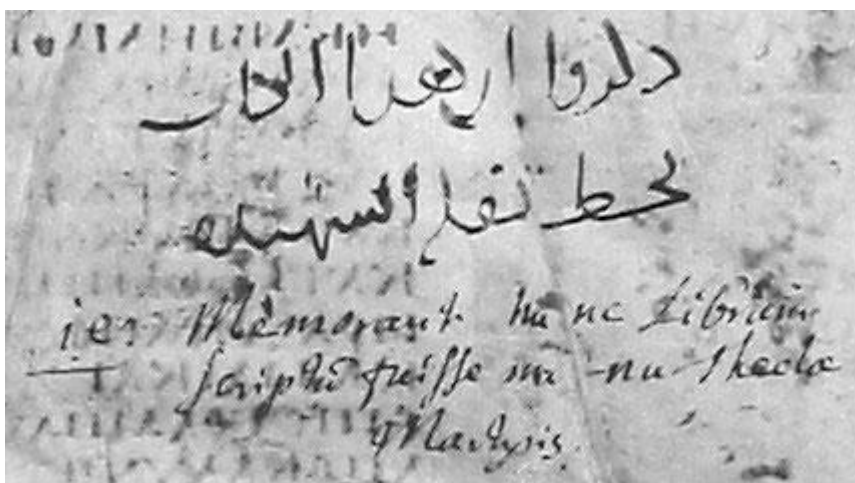
On the back of the first leaf of the Codex, an Arabic inscription, followed by a Latin translation, reads:

ذكروا أن هذا الكتاب بخط ثقل الشهيدة

i.e.: Memorant hunc Librum scriptum fuisse manu Theclae Martyris.<sup>31</sup>

---

<sup>31</sup> Translation: “i.e., they say this book was written by the hand of Thecla the Martyr.”



**Figure 2.1: An Arabic inscription regarding Thecla and its Latin translation**

In his 1828 edition of the OT of Alexandrinus, Baber quoted his correspondence with Prof. Alexander Nicoll (Oxford's Regius Professor of Hebrew and renowned orientalist), in which Nicoll suggested that the Arabic text was added to the manuscript at the time of Cyril Lucar, or just a little before, and that the Latin explanation was added by another hand generally contemporary to the first.<sup>32</sup> In 1874, F. H. A. Scrivener likewise noted in his book on textual criticism that the Arabic text on the first leaf of the codex was "translated into Latin by another not very modern scribe."<sup>33</sup> However, the following year, William Aldis Wright recognized the handwriting of the Latin text to be none other than that of the King's Librarian, Richard Bentley,<sup>34</sup> and Scrivener was compelled to retract his observation and cite Wright's assertion in the following edition of his book.<sup>35</sup>

The origins of the Arabic text are less easily explained. Scrivener conveyed Samuel Tregelles' creative theory that the inscription was written by an Egyptian who mistakenly attributed the text to Thecla based on where the damaged New

<sup>32</sup> Baber, xvii–xviii.

<sup>33</sup> Frederick Henry Scrivener, *A Plain Introduction to the Criticism of the New Testament for Use of Biblical Students*, 2d ed. (Cambridge: Deighton, Bell, and Co, 1874), 89.

<sup>34</sup> Wright, 401. Indeed, the writing can be safely identified as belonging to Richard Bentley.

<sup>35</sup> Frederick Henry Scrivener, *A Plain Introduction to the Criticism of the New Testament for the Use of Biblical Students*, 3d ed. (Cambridge: Deighton, Bell, and Co, 1883), 94.

Testament text today begins (at Matthew 25:6); because the Greek church's menology assigns Matthew 25:1–13 to the commemoration of St. Thecla (September 24th), Tregelles surmised that there was likely to have been a note regarding Thecla in the upper (now missing) margin of that first page of the manuscript, and the Egyptian observing the name there might have believed Thecla to be the producer of the text. In the second edition of his *Introduction*, Scrivener presented and endorsed Tregelles' theory, finding it "to be certain, almost to demonstration."<sup>36</sup>

In 1881, Thompson challenged this theory in the full-sized facsimile edition of Alexandrinus, noting that: (1) this assumes that Matthew's Gospel has been in its current imperfect condition since at least the 14th century, and that the New and Old Testaments were also at that time in separate volumes; and (2) the Arabic numbering of the leaves, "which is of about the same age as the inscription," indicates that Matthew's Gospel was intact at the time of numeration (the numbering ends at 641 in the Old Testament and begins at 667 in the New).<sup>37</sup> Thompson concluded that the 25 leaves containing the beginning of Matthew were lost at a date later than the Arabic inscription.<sup>38</sup> As a result, in the third edition of his text, Scrivener cited Thompson's observations as "a fatal objection" to Tregelles' theory—which Scrivener then rejected.<sup>39</sup>

---

<sup>36</sup> Scrivener, *A Plain Introduction*, 2d ed., 93.

<sup>37</sup> *Facsimile*, 1:4.

<sup>38</sup> This is confirmed in the analysis of Chapter 3.

<sup>39</sup> Scrivener, *A Plain Introduction*, 3d ed., 98. This position stands in the final (posthumous) edition of Scrivener's work (Frederick Henry Ambrose Scrivener, *A Plain Introduction to the Criticism of the New Testament for the Use of Biblical Students*, 4th ed., ed. Edward Miller [London: George Bell & Sons, 1894], 1:102).

Reviewing Scrivener's third edition text, J. Rendel Harris objected to Scrivener's reversal on Tregelles' theory.<sup>40</sup> Harris claimed that Thompson's observations were not as strong as Scrivener implied and that, without any certain priority between the Arabic numbering of the pages and the Arabic inscription regarding Thecla, Tregelles' theory remained effectively unchallenged.<sup>41</sup>

More recently, Scot McKendrick dealt with the inscription by recalling Nicoll's observation that this Arabic inscription shared neither date nor hand with the inscription made by Athanasius on V1.F5a; thus:

Despite what has been so frequently stated, it was his opinion that all these two inscriptions have in common is their language. Whereas Athanasius's note was written around the turn of the thirteenth or fourteenth centuries, the anonymous attribution of Alexandrinus to Thecla was probably written much later, possibly around the beginning of the seventeenth century. According to Nicoll it was written in Lucar's time 'vel paullo antea ea'.<sup>42</sup>

McKendrick concludes that distancing this inscription from the time of Athanasius serves to undermine the authority of the claim and remove the pressure to attribute an Egyptian origin to the manuscript. Accordingly, McKendrick accredits Lucar's inscription regarding Thecla (see above) to an interpretation of this Arabic inscription; whether Lucar forged the Arabic inscription "or merely credited it unquestioningly" is unknown.<sup>43</sup>

---

<sup>40</sup> Harris also complained that Scrivener had misunderstood Thompson's explanation of the Arabic page numeration, because Scrivener related Thompson as pointing out that the numeration of the (presumably) first extant leaf of Matthew "is 26"—though he footnotes that "the first in the New Testament [is] 667" (Scrivener, *A Plain Introduction*, 3d ed., 98). The Arabic numbering is discussed in detail in Chapter 3.

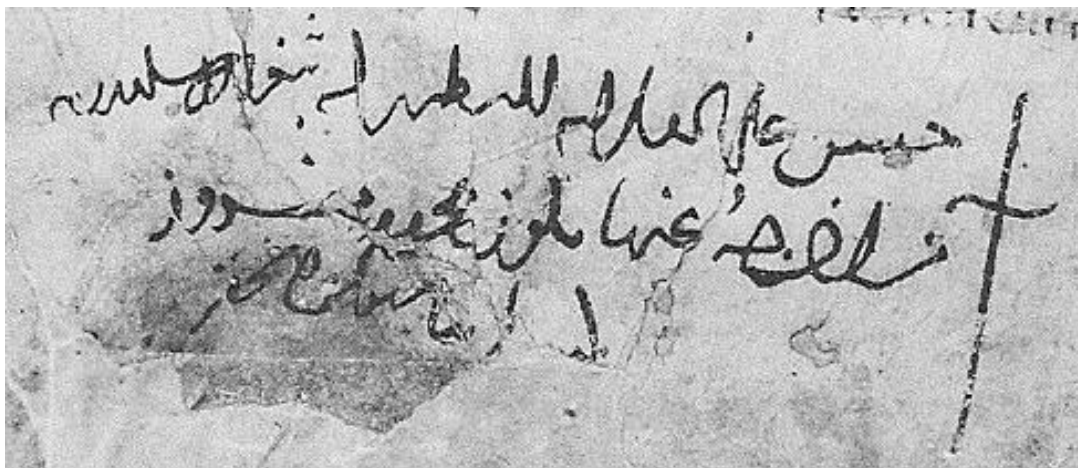
<sup>41</sup> J. Rendel Harris, review of F. H. A. Scrivener, *Introduction to the Criticism of the New Testament*, *AJP*, 5, no. 1 (1884): 96–99.

<sup>42</sup> McKendrick, "The Codex Alexandrinus," 5. Just a few years prior to McKendrick's chapter, Pattie had (strongly) stated that this inscription "is not to be believed for a minute" (69).

<sup>43</sup> McKendrick, "The Codex Alexandrinus," 6.

### Inscription on V1.F5a

Another Arabic inscription, in an badly written scrawl, is found at the bottom of the first leaf of Genesis (V1.F5), centered below the two columns of scriptural text and accompanied by an angled cross to the right of the inscription. The text is difficult to read, the matter complicated by the vellum being stained and damaged in the midst of the inscription.



**Figure 2.2: The inscription of Athanasius the Humble**

In Baber's edition, Prof. Nicoll deciphered this Arabic text to read:

- (1) حبس علي القلاية للبطريك بئر الاسكندرية
- (2) من يخرجها عنها يكون محروم معروز
- (3) اثناسيوس الحقيق

At length Nicoll explained his reading of the text, providing this Latin translation of the Arabic:

- (1) Dicatus est [liber] Cellae Patriarchae in urbe-munita Alexandria.
- (2) Qui eum [librum] ex ea [Cella] extraxerit, sit anathematizatus, vi-avulsus [ab Ecclesia et consortio hominum].
- (3) Athanasius humilis.<sup>44</sup>

<sup>44</sup> Baber, xxvii. Translated: "(1) [This book] dedicated to the Patriarchal Cell in the fortified city of Alexandria. (2) He who will have removed it [this book] from it [the Cell], let him be anathematized, torn away by force [from the church and fellowship of man]. (3) Humble Athanasius."

From Nicoll's reading, at whatever time the Codex was given to the Patriarchal Cell, it was given as a *wakf*—legal terminology for an irrevocable gift that includes protection from confiscation by others. That the inscription employed this terminology is perhaps useful in narrowing the possibilities for dating when it was written. In Egypt, the earliest recorded *wakf* is from AD 919, while the use of *wakf* for book/manuscript endowments in northern Africa is much later (beginning in the late 13th century).<sup>45</sup>

Additionally, Nicoll challenged an earlier but contemporary reading of the third line by Abraham Salam (also presented by Baber), which identified the name of the inscription's writer as "Basilius" or "Sabas" instead of "Athanasius."<sup>46</sup> He also noted that the only similarity between this inscription and the Thecla inscription on V1.F4b is language; in his judgment the two inscriptions share neither hand nor date.<sup>47</sup>

Nearly seventy years later, the Reverend Charles Holland Hoole of Oxford published a pamphlet on Codex Alexandrinus in which he dated the codex to the middle of the fourth century and attributed this Arabic inscription to circa AD 1310. The contents of Hoole's pamphlet survive in a book review found in *The Academy*, published in 1891. Hoole was apparently in agreement with Nicoll's understanding of the gift being a *wakf*, since the review quotes Hoole's translation as:

---

<sup>45</sup> G. C. Kozlowsky, "Wakf (a.)," in *Encyclopaedia of Islam*, Second Edition, 11:59.

<sup>46</sup> On the first page of his notes (in the volume of *Prolegomena et notæ*), Baber identifies Abraham Salam as "Aegyptiaci, et linguarum Orientalium Britanniarum Regi interpretis" and records his reading of this inscription as: "Dicatum [datum, adstrictumque in pios usus, inhibita illius alienatione] signatura patriarchae in Ostiis Alexandriae. Quicumque hoc transgressus fuerit, sit excommunicatus, anathematizatus, segregatus ab ecclesia. Scripsit hoc [Basilius aut Sabas] humillimus."

<sup>47</sup> Baber, xxvii.

Made an inalienable gift to the Patriarchal cell in the city of Alexandria. Whoever shall remove it thence shall be accursed and cut off. Written by Athanasius the Humble.<sup>48</sup>

Twenty years after that, F. C. Burkitt re-examined the inscription and disagreed with Nicoll's reading in a few particulars. Burkitt believed that the hand writing this inscription was the same as that of the Thecla inscription,<sup>49</sup> and the Arabic text instead reads:

- (1) حُبِسَ عَلَى الْقَلَايَةِ الْبَطْرِيَرِكِيَّةِ بِثَغْرِ الْإِسْكََنْدَرِيَّةِ  
 (2) مَنْ أَخْرَجَهُ يَكُونُ مُحْرَمٌ مَشْرُوزٌ  
 (3) كَتَبَ اثْنَانَسْيُوسُ الْحَقِيرُ

Which he translated as:

- (1) Bound to the Patriarchal Cell in the Fortress of Alexandria  
 (2) He that lets it go out shall be cursed and ruined.  
 (3) The humble Athanasius wrote (this).<sup>50</sup>

Burkitt varied from Nicoll's reading on the following points: for the fourth word of the first line, Burkitt read the adjectival *البطريكية* while Nicoll read *للبطريك*; at the beginning of the second line, Burkitt read *مَنْ أَخْرَجَهُ يَكُونُ* while Nicoll read *مَنْ يَخْرُجُهُ عَنْهَا يَكُونُ*; at the end of the second line, Burkitt read *مَشْرُوزٌ* to Nicoll's *مَهْرُوزٌ*; and Burkitt understood the damaged text at the beginning of the third line to read *كَتَبَ*, while Nicoll only read the signature *اثناسيوس الحقيير* (where Nicoll read the first character as an *Alif*, Burkitt read a *Kaf* by noting its similarity with a *Kaf* in the Thecla inscription).<sup>51</sup> None of these differences are particularly significant to the meaning of the inscription, however; both readings indicate the

<sup>48</sup> Hoole, 73.

<sup>49</sup> F. C. Burkitt, "Codex 'Alexandrinus'," *JTS* 11 (1909–1910): 606.

<sup>50</sup> Burkitt, 604.

<sup>51</sup> Burkitt, 604; however, Burkitt did not make a case for why the two inscriptions should be related.

book was dedicated as a *wakf* to the Patriarchal Cell of Alexandria, that a curse is pronounced on whoever removes the book from its place of dedication, and the inscription was written (either explicitly in Burkitt's reading or implicitly in Nicoll's) by a humble Athanasius.

The identification of this Athanasius has proved a matter of debate. Nicoll arrived at the name Athanasius after collecting the names of patriarchs for comparison.<sup>52</sup> In 1881, Thompson concluded that the writer of the inscription "was probably Athanasius III, the Melchite Patriarch, who succeeded in the latter part of the 13th century, and who was still living in the year 1308."<sup>53</sup> As mentioned above, around 1891 Hoole estimated the date of the inscription to be roughly 1310. In 1910, Burkitt questioned why this Athanasius had to be a patriarch at all; instead, perhaps there was no need for the manuscript to be in Alexandria in AD 1300, perhaps Matthew Muttis' testimony was correct and Cyril Lucar retrieved the Codex from Mount Athos in 1616, and perhaps Athanasius was merely someone on Cyril Lucar's staff.<sup>54</sup> In 1915, Kenyon argued very reasonably that—while not wanting to debate Arabic palaeography—Burkitt's acceptance of the Muttis story was problematic; there would be no reason for Lucar to pitch the manuscript as having an Egyptian origin or deny himself the opportunity to receive honor for discovering the manuscript at Mount Athos if that had occurred.<sup>55</sup> Regardless, in 1937, Silva Lake

---

<sup>52</sup> Baber, xxviii.

<sup>53</sup> *Facsimile*, 1:3.

<sup>54</sup> Burkitt, 604–605. Burkitt came to this conclusion based on the fact that palaeography could not date the inscription and that there is evidence that patriarchs *indicate* that they are patriarchs. Additionally, Burkitt admitted that his purpose in proposing this alternative history for Alexandrinus was to "call attention to the extreme slenderness of the material" used to construct what was the generally accepted history of the text (606).

<sup>55</sup> Kenyon wrote: "If Cyril himself had found [Alexandrinus] at Athos, and presented it to the patriarchate at Alexandria with an anathema on its removal, it is not very likely that he would have transferred it to Constantinople, and still less likely that he would have impressed its Egyptian origin



found the idea that the note was written by Athanasius III in the Cairo Library of the Patriarchs to be “based on the intrinsically improbable assumption that an Athanasius mentioned in an Arabic note on the first page of Genesis was the Patriarch of that name”; she instead supposed that a companion of Cyril Lucar wrote the note.<sup>56</sup> In 1938, Skeat and Milne rejected a seventeenth century dating of the Arabic inscription, asserting that Arabic scholar A. S. Fulton of the British Museum had confirmed a thirteenth to fourteenth century date, based on palaeographic grounds.<sup>57</sup> A few years later, C. A. Phillips asserted that this note, “recently proved to be of the thirteen or fourteenth century and not of the seventeenth century” was “usually identified with Athanasius III.”<sup>58</sup>

T. C. Skeat once again challenged those who questioned a thirteenth or fourteenth century dating of the inscription (and thus its association with Athanasius II,<sup>59</sup> the Patriarch of Alexandria from 1276 to 1316) in 1955 by comparing the inscription against two found in T. D. Moschonas’ catalogue of the contents of the patriarchal library. Manuscript 12, a tenth century text of John Chrysostom, has an inscription reading:

---

on Sir Thomas Roe as he evidently did, and suppressed its Athoan derivation and his own merit in discovering it. But even if these difficulties are ignored, it is plainly incredible that he should with his own hand have stated its Egyptian origin, as he does in the autograph note prefixed to the manuscript, and should have attributed the mutilation of the end of the MS. to the ill-treatment which the Christians and their books suffered after the Mahomedan conquest of Egypt” (*RF<sup>OT</sup>*, 1:1).

<sup>56</sup> Lake, 9.

<sup>57</sup> T. C. Skeat and H. J. M. Milne, *The Codex Sinaiticus and the Codex Alexandrinus with Six Illustrations* (London: Trustees of the British Museum, 1938), 29. Unfortunately, this is the extent of the evaluation provided by Dr. Fulton through Skeat and Milne.

<sup>58</sup> Phillips, 301.

<sup>59</sup> Skeat noted that Athanasius II was typically referred to as Athanasius III “in English textbooks, following Le Quien’s *Oriens Christianus*,” but corrected the name because “the Athanasius II implied by that numeration was Monophysite and therefore not recognized by the Orthodox Church” (T. C. Skeat, “The Provenance of the Codex Alexandrinus,” *JTS* 6 [1955]: 233). Unfortunately, the two titles do appear to be used in textbooks to refer to the same Patriarch.

✠ Τὸ παρὸν βιβλίον προσεκτήθη μοι ἐν τῇ βασιλευούσῃ τῶν πόλεων, ἀφιερῶθη δὲ τῇ κατὰ Ἀλεξάνδρειαν ἀγιωτάτῃ τοῦ Θεοῦ Ἐκκλησίᾳ τοῦ Πατριαρχείου· ὁ καὶ ὀφείλων τὸν θρόνον διαδεξόμενος διακομίσαι καὶ ἀποδοῦναι ἐκεῖσαι ἐν οἷς καὶ ἀφιερῶθη· τίθημι δὲ ἀφορισμὸν ἐπὶ τῷ ἀφαιρήσονται τοῦτο ἢ ἀποστερήσονται :— ✠ ὁ ταπεινὸς Ἀθανάσιος Ἀλεξανδρείας.<sup>60</sup>

The second, also of Chrysostom, is Manuscript 34:

✠ Τὸ παρὸν βιβλίον ἀπεχαρίσθη μοι παρὰ τοῦ κύρ· Δημητρίου τοῦ ἱατροπ(ού)λ(ου) ἐν Κων(σταντινου)π(ό)λ(ει), ἀνετέθη δὲ παρ' ἐμοῦ τῇ ἀγιωτ(ά)τ(η) τοῦ Θεοῦ Ἐκκλησίᾳ τῇ ἐν Ἀλεξανδρείᾳ εἰς μνημόσυνον αὐτοῦ· ὀφείλει γοῦν ὁ τὸν θρόνον διαδεξάμενο(ς) ἀναλαβεῖν καὶ διασῶσαι ἐν τῷ π(ατ)ριαρχ(είῳ) ἐν οἷς καὶ ἀφιερῶθη· ὅστις δὲ πειράσεται ἀφαιρῆσαι τοῦτο ἀφορισμῷ ἀλύτῳ καθυποβληθήσεται : ✠ ὁ ταπεινὸς Ἀθανάσιος Ἀλεξανδρείας.<sup>61</sup>

Skeat concluded that, despite the fact that the Arabic and Greek hands could not be compared, it was certainly clear that: (a) the two Greek inscriptions were made by Athanasius II; (b) the author of the Arabic text must also be Athanasius II, as similarity of inscription would indicate; (c) the Greek manuscripts came from Constantinople where Athanasius II spent nearly thirty years of his time as patriarch in that city; (d) the Greek notes must have been written between the time Athanasius II returned to Egypt (1308) and his death in 1316; and (e) it is highly probable that Alexandrinus was acquired by Athanasius during his long stay in Constantinople.<sup>62</sup> Thus, asserted Skeat, Burkitt may have been right that Alexandrinus arrived in Alexandria from Constantinople, but for the wrong reasons.<sup>63</sup> And at the very least, the Athanasius inscription in Alexandrinus does not indicate that the manuscript

---

<sup>60</sup> T. D. Mosconas, *Catalogue of MSS of the Patriarchal Library of Alexandria* (Salt Lake City: University of Utah Press, 1965), 17. Translated by Skeat as: "The present book was acquired by me in the Queen of Cities [i.e. Constantinople] and dedicated to the Holy Patriarchal Church of God in Alexandria: which whosoever shall succeed to the [Patriarchal] Throne is bound to transmit and hand down in the place where it has been dedicated. And I pronounce an anathema upon him who shall remove or abstract it" (T. C. Skeat and H. J. M. Milne, *The Codex Sinaiticus and the Codex Alexandrinus*, 2d ed. [London: Trustees of the British Museum, 1963], 32).

<sup>61</sup> Mosconas, *Catalogue*, 37.

<sup>62</sup> Skeat, "The Provenance of the Codex Alexandrinus," 234–235.

<sup>63</sup> Skeat, "The Provenance of the Codex Alexandrinus," 235.

resided in Alexandria for all time; rather the note indicates that the text had previously been somewhere *other* than the patriarchal library.

By 1957, Skeat had located a third manuscript with a note from Athanasius II, this one in Arabic (with a Greek signature), in Vatican MS. Ottobonianus graecus 452. Skeat counted the manuscript as “one of a group of some twenty manuscripts which were removed from the Patriarchal Library at Alexandria early in the eighteenth century” to reside at the Vatican.<sup>64</sup> This attribution was noted in passing a half-century before, in an article by Dahse,<sup>65</sup> though it understandably went unnoticed in the 20th-century debate. Skeat reproduced the note (as translated by A. S. Fulton) as:

This book of exalted state, grave import, rare, unique, containing an exposition of the six Books of the Prophets and the text of their words, being a collection of commentaries on the said books by divers expositors, I sought as a gift from the holy Emperor Lord Andronicus Palaeologus, son of the holy Emperor Lord Michael (may God preserve their dominion); and I brought it with me from the City [i.e. Constantinople] as my property and it is an unalienable gift to the holy Patriarchal and Marcan cell. Whosoever removes it thence by any manner of sale or pledge or appropriation shall be under prohibition and ban. Written by Athanasius the Patriarch. ✠ Ἀθανάσιος Ἀλεξανδρείας<sup>66</sup>

Unfortunately, to my knowledge, the manuscript (an 11th-century *catena* codex)<sup>67</sup> is unavailable in facsimile edition. Regardless, the mixed-Arabic-and-Greek signature of Ottobonianus 452 was the evidence needed to assign the Athanasius note in

---

<sup>64</sup> *RFOT*, 4:4. This citation was repeated by Pattie in 1998 (70). It is unclear in a comment from Mejia if others question whether Athanasius III (as opposed to Athanasius II) was responsible for the inscription in Alexandrinus or the inscription in Ottob. 452: “Uno de estos manuscritos se encuentra en la Biblioteca Apostólica Vaticana: Ottob. 452. Atanasio, si es el III de ese nombre –otros dicen el II–, dataría del final del siglo 13 y principios del 14” (Jorge Mejía, “Las Biblias Completas,” *Revista Teología* 44, no. 92 [April 2007]: 101).

<sup>65</sup> Johannes Dahse, “Zur Herkunft des alttestamentlichen Textes der Aldina,” *ZAW* 29 (1909): 185.

<sup>66</sup> *RFOT*, 4:4.

<sup>67</sup> Georgius Karo and Iohannes Lietzmann, *Catenarum graecarum catalogus* (Göttingen: Königlich Gesellschaft der Wissenschaften zu Göttingen, 1902), 333.

Alexandrinus to Athanasius II with certainty. Skeat concluded, therefore, the following timeline:

- 1276: Athanasius II elected Patriarch of Alexandria
- 1282: Emperor Michael Palaeologus died and was succeeded by Andronicus II
- 1308: Athanasius II left Constantinople for Alexandria
- 1316: Patriarchal term of Athanasius II ends (he is succeeded by Gregory II)

Thus, according to Skeat, Alexandrinus must have been presented to the Patriarchal cell by Athanasius II between 1308 and 1316.

More recently, in 2003, Scot McKendrick noted the similarity between this inscription by Athanasius and an Arabic inscription at the end of another manuscript delivered to Sir Thomas Roe by Cyril Lucar. This manuscript (Roe MS 13) is an Egyptian document stolen from Alexandria and containing commentaries on the Psalms by Hesychius and John Chrysostom; McKendrick translates the Arabic at the end of the manuscript to read: "I have constituted this book an endowment to the See of St Mark and whoever removes it will be excommunicated. Written by Athanasius the humble."<sup>68</sup> With this evidence that Lucar *did* obtain manuscripts from Egypt, and acknowledging that the patriarchal seat of Alexandria resided in Cairo since the end of the tenth century, McKendrick wrote that this "adds flesh to the story that Alexandrinus was brought by Lucar from Egypt."<sup>69</sup> According to McKendrick, the additional manuscript data that he analyzed affirms Skeat's conclusion that the Athanasius note indicates that Alexandrinus was a new acquisition to the patriarchal library.<sup>70</sup>

---

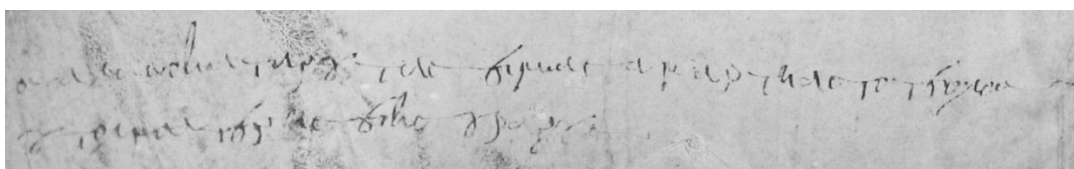
<sup>68</sup> McKendrick, "The Codex Alexandrinus," 4.

<sup>69</sup> McKendrick, "The Codex Alexandrinus," 4.

<sup>70</sup> McKendrick, "The Codex Alexandrinus," 8.

## Inscription on V3.F83b

In the bottom margin of this folio (which contains Song of Songs 1:2–3:2) is an intervention in a cursive, non-literary hand. The note is written in two lines, with some word separation, across the width of the bottom margin. The letter shapes are those peculiar to the Byzantine hand developed in the sixth century, with an open-topped *alpha*, an h-shaped *eta*, an *epsilon* with an oblique projection well above the upper notional line and a loop below, a *lambda* with a long oblique projection to the left below the line, a *nu* that resembles a *mu* without the final tail, and a ligature of *ou* that resembles a lower case *gamma* ( $\gamma$ ) with a loop instead of a tail.<sup>71</sup>



**Figure 2.3: Inscription in the lower margin of V3.F83b**

Burkitt identified this “very ill-spelt sentence” as a repeat of the text found in the bottom right corner of the following leaf (V3.F84a). Burkitt attempted to decipher the text, rendering it as:

ο ταλαως κατανου τας εμας αμαρτηας τοτε ωλως

ου τολμο απενησε ης ουρανους

Regardless, in his estimation the sentence “has nothing to do with the text” (of the Song of Songs) and “it appears to be the work of some one who lived about the tenth century, and had more piety than grammar.”<sup>72</sup> Burkitt described the inscription in his review of the *Reduced Facsimile*, which presumably was the only source of the

<sup>71</sup> Frederic G. Kenyon, *The Palaeography of Greek Papyri* (Oxford: Clarendon Press, 1899), 49–52. Similar hands are found in a sixth century loan document (RMO 1976/4.36.1; image available in Klaas A. Worp, “A Byzantine Loan of Money,” *BASP* 48 [2011]: 73) and a sixth century lease (Plate IX in Kenyon).

<sup>72</sup> Burkitt, 606.

images he used in his analysis. He conceded, at the end of his review, that “all this is quite inconclusive: let us hope that the future volumes of the new facsimile will do something to clear the matter up.”<sup>73</sup>

Unfortunately, non-literary hands of this type are difficult to read. Further compounding the issue of identifying the characters in the inscription is the faded nature of the writing and the lack of a color image of the leaf. If Burkitt’s assertion that the text is repeated on the following page is set aside to evaluate the V3.F83b inscription on its own, a partial reconstruction of the text appears to read:

ο υ γ α . . . . α σ η ο α φ α ν ο υ τ α σ ε ι μ α σ α μ α ρ τ η α σ τ ο τ ε . λ . α  
ο υ τ ο λ μ α ι γ ε ν ε α σ ε τ η σ ο υ ρ α ν ο υ

The subject of the second line appears to be a citizen of heaven (ετης ουρανου) who does not dare (ου τολμαι) something, though the intervening text (γενεας?) is uncertain. The first half of line one has faded and may not be determinable with any certainty from facsimile alone. Left of center in the first line the phrase τας ειμας αμαρτηας is clearly visible, possibly followed by τοτε.

That a note mentioning sins and a citizen of heaven has been recorded at the beginning of a sexually-charged text such as the Song of Songs is intriguing. Burkitt’s reading based on the text being repeated on V3.F84a is not altogether satisfying, especially when attempting to read the F83b inscription without dependency on the F84a inscription. A physical examination of this page of the manuscript may allow for more than speculation as to both the reading and the meaning of this inscription.

---

<sup>73</sup> Burkitt, 606.

### Inscription on V3.F84a

In the bottom right corner of this folio the remains of an intervention from which the right side has been cut away is visible. The hand appears to be the same as that of the previous inscription (on V3.F83b). Not enough of the writing remains to confidently determine its meaning. Apart from a physical examination of the manuscript, the text appears to be:

line 1: ο τ α λ .

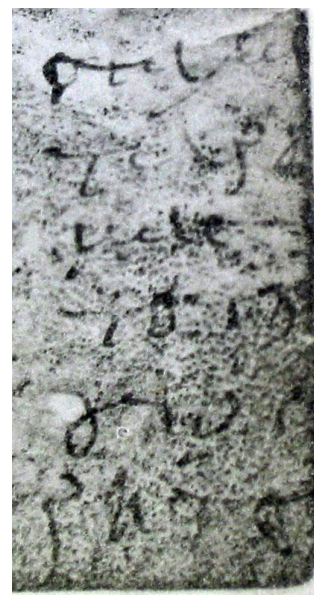
line 2: τ α ρ ου

line 3: μ α .

line 4: τ ου τ ου

line 5: ου . . .

line 5: ρ η . .



**Figure 2.4**

As mentioned in the discussion of the inscription of V3.F83b above, Burkitt sought to read this inscription as a duplicate of the inscription in the bottom margin of the previous leaf. The first line (ο τ α λ) appears to be a match for the start of Burkitt's rendering, but there is less certainty here than in the previous inscription.

### Inscription on V2.F142b

The other side of this leaf (V2.F142a) contains the last verses of Bel and the Dragon. This side of the leaf contains no biblical text, and is blank but for an inscription at the bottom right corner of the page reading: ομου τετραδια μικρα και μεγαλα ξς. Referring to a number of quires "great and small," this intervention is a product of a later hand and appears to be commenting on the composition of the

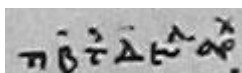
codex. It is difficult to date this hand, so analysis of this note is deferred to a discussion of the binding in Chapter 3.



Figure 2.5: The *tetradia* inscription

### Lecture Notation (OT Only)

At some point in the later history of Alexandrinus, 69 lection notes corresponding to Great Lent and Holy Week were added to several of the OT books (Exodus, Isaiah, Jeremiah, Ezekiel, Zechariah, Job, and Proverbs). All the reading notes appear to be written by the same minuscule Greek hand, and they are written in a very concise format; the start of each lection is indicated in the left margin, the end of each lection is indicated in the right margin. Capital characters are generally used for numeration in these lection notes, but occasionally minuscule characters appear instead (most commonly for  $\delta$ ). The reading schedule matches well with the lectionary of the Greek Orthodox Church, though it is incomplete even for the calendar periods covered (the readings in Genesis for Great Lent, for example, do not appear to have been marked). Thompson assigned the notes (“Lessons”) to the 16th century, but without any explanation for that dating.<sup>74</sup> All but five of the notes follow one of the following two formats:

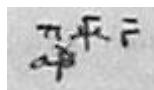


This note indicates the start (*αρχη*) of a reading for the second (B) day of the fourth ( $\Delta$ ) week (*εβδομαδα*) of Great Lent (*τεσσαρακοστη*). The first

<sup>74</sup>Facsimile, 1:6.



symbol in these notes is likely the abbreviation  $\pi(\epsilon\rho\iota\kappa\omicron\pi\eta)$ , or possibly  $\pi(\epsilon\rho\iota)$ .<sup>75</sup>






This note indicates the start ( $\alpha\rho\chi\eta$ ) of a reading for the third ( $\Gamma$ ) day of Holy Week ( $\tau\epsilon\sigma\sigma\alpha\rho\alpha\kappa\omicron\sigma\tau\eta$   $\mu\epsilon\gamma\alpha\lambda\eta$ ).



All readings are terminated by the same ligature for  $\tau\epsilon\lambda\omicron\varsigma$ , which is written in the right margin, rather than in the left.

The remaining five lection notes that break from the above patterns include:

- two Sixth Hour readings in Ezekiel in which the *mu* and *gamma* ligature has been replaced by a *mu* and *stigma* ligature  (*stigma* perhaps for *Sixth* Hour);
- a modified note at Zechariah 8:7 (the Friday of Cheese Fare Week), which seems to indicate a sixth day in Great Lent, but with an abbreviation of  (likely for  $\tau\upsilon\rho\omicron\phi\alpha\gamma\omicron\upsilon$ ) following the ligature for Great Lent;
- a more complex symbol  ( $\tau\pi\rho/\tau\pi\rho?$ ; possibly  $\tau\omicron$   $\pi\rho\tau\epsilon\rho\omicron\nu$  or  $\pi\alpha\rho\alpha\sigma\kappa\epsilon\upsilon\eta$ )<sup>76</sup> following the ligature for Holy Week at Zechariah 11:10, read during the First Hour reading on Holy Friday;

<sup>75</sup> Apart from the very common abbreviations for  $\alpha\rho\chi\eta$  and  $\tau\epsilon\lambda\omicron\varsigma$ , none of the other abbreviations used in the lection notes appear in the substantial abbreviation collections such as those of Bilabel (F. Bilabel, “Siglae,” in PW<sup>2</sup>), McNamee (Kathleen McNamee, *Abbreviations in Greek Literary Papyri and Ostraca* [Chico, CA: Scholars Press, 1981]), Blanchard (Alain Blanchard, *Sigles et abréviations dans les papyrus documentaires grecs* [London: University of London, 1974]), or Oikonomidēs (Al. N. Oikonomidēs, *Abbreviations in Greek Inscriptions: Papyri, Manuscripts, and Early Printed Books* [Chicago: Ares Publishers, 1974]). A suspended abbreviation of  $\pi\epsilon\rho\iota$  appears in Bilabel’s article as  $\pi$  with an oblique mark above it (2296), but a simple suspension is sufficient to indicate an abbreviated form in notes such as these.

<sup>76</sup> *Haec compendiose scripta pro τη μεγάλη παρασκευη αρχη, sic a manu recenti addita sunt* (Baber, 133). Since the day of Holy Week is otherwise not indicated in the lection note, *παρασκευη* (Friday, the day of preparation) is an appealing interpretation of the abbreviation; I remain open to

- the notation used at Ezekiel 37:1 (Matins, Holy Saturday) that

incorporates different ligatures, reading .<sup>77</sup>

In addition to these Greek lectionary notes, two brief Arabic notes are found at V3.F84b and V3.F85b. The first reads *yawm al-jum'a* (“Friday”) and occurs in the margin to the left of Wisdom 2:11b (τὸ γὰρ ἀσθενὲς ἄχρηστον ἐλέγχεται); no readings from Wisdom 2 occur in the Greek Orthodox lectionary. The second appears to read *al-fish* (“Easter”) and occurs in the margin to the left of Wisdom 5:1; likewise, no readings from Wisdom 5:1 occur in the Greek Orthodox lectionary either—on Easter or at any other time. It is unlikely that this hand is the same as the Greek hand that added the other lection notes. Burkitt, however, believed that all the Arabic writing in the manuscript was contemporary, “if not by the same hand.”<sup>78</sup>

Because the Greek lection notes do not appear anywhere in the Gospels or Acts, it is possible that the project of adding them was abandoned after it was started or that only a partial lectionary was available to the scribe that was copying them into Alexandrinus. The hand is later than fifth century and thus most certainly not original to the production of the manuscript, but dating such short samples of text is difficult.<sup>79</sup> Abbreviation by suspension with or without a final written letter raised above the penultimate letter—as found in these lection notes—is quite common from

---

other possibilities since I have been unable to find any other occurrence of *παρασκευη* being abbreviated in this way.

<sup>77</sup> This pericope marker is more difficult to decipher. Being a Matins service, the Paschal vigil, it is possible that the note refers to τον ορθρον (the *tau* with raised *omicron*) of τεσσαρακοστη μεγαλη, the Sabbath (suspended *σα*). The *προ* ligature/abbreviation might stand for πρωτη ανασταση or πρωι. Baber offered no interpretation of this abbreviation (165).

<sup>78</sup> Burkitt, 606. In that list he included the Thecla inscription, the Athanasius inscription, the Arabic page numeration, and these two (“Friday” and “Easter”) notes.

<sup>79</sup> Baber only noted that they are added by a later hand (239).

the sixth century onward.<sup>80</sup> Specific abbreviation forms are notoriously difficult to date because they emerged, disappeared, and resurfaced with no predictable pattern.<sup>81</sup> Additionally, the letter forms used in the lection notes (such as the *pi* with the shortened horizontal bar or the u-shaped *beta*) are equally unhelpful as many of them could date from AD 600 or later.<sup>82</sup> The most that can be said with certainty regarding these notes is that there was intent to use Alexandrinus in a liturgical setting at some point in the sixth century or later, but the work of adding the lection notes was never completed. Because of the large size of Alexandrinus (discussed in detail in Chapter 3) and the expense required to produce such a massive codex, it was most certainly not simply a Bible for portable, personal use; it was much more likely institutionally owned. The lection notes indicate that the codex was in early possession of the Greek Orthodox Church, where it can be later placed with certainty at the time of Athanasius II.

### Summary

The interventions made throughout Alexandrinus provide some useful clues to its history prior to 1627. The Arabic note on the first leaf of Genesis made by the Patriarch Athanasius II (V1.F5a) places the codex in Cairo in the first decade of the 14th century, a *wakf* to the Patriarchal Cell; that Athanasius brought Alexandrinus with him from Constantinople is probable but unproven. As Chapter 3 will reveal, the Arabic page numbering that is likely coeval with the Athanasius inscription reveals that the codex was used as a single bound volume while in the hands of the

---

<sup>80</sup> Giovanna Menci, "Abbreviations," in *BNP*.

<sup>81</sup> Nikolaos Gonis, "Abbreviations and Symbols," in *The Oxford Handbook of Papyrology*, ed. Roger S. Bagnall (Oxford: Oxford University Press, 2009), 171.

<sup>82</sup> A casual perusal of tables 3–10 in Gardthausen confirms the difficulty of dating these characters (Viktor Emil Gardthausen, *Greichische Palaeographie* [Leipzig: B. G. Teubner, 1879]).

Patriarch. Likewise, the partial lectionary notes in several OT books for Great Lent and Holy Week reveal that the codex was intended to serve a liturgical function within the Greek Orthodox Church sometime after the sixth century.

In light of the inscriptional data at the fore of Alexandrinus, what should be made of J. R. Wettstein's story regarding his Greek teacher, Matthew Muttis? Despite the fact that this account has found support by the likes of F. C. Burkitt and Silva Lake, it faces serious challenges from Kenyon and the inscription that must be from Athanasius II in the early 1300s. Muttis' story could be true if the patriarchal library acquired Alexandrinus around the year 1300 and then somehow the text was lost or stolen only so that it might be re-acquired from Mount Athos over 300 years later. As a *wakf*, it seems highly unlikely that a patriarch of an older era would have given the text away—though Cyril Lucar's desperate position certainly led him to violating the inscription's warning. It appears that Alexandrinus arrived in Cairo (even Burkitt noted in his analysis of the Athanasius inscription that *قلاية* ["cell"] was a term used for Malkite and Jacobite patriarchal residences in Cairo)<sup>83</sup> somewhere between 1308 and 1316, at which time Athanasius II wrote his inscription at the bottom of the first page of Genesis. If acquisition from Mount Athos may be safely dismissed, then locating Alexandrinus in Cairo from the early 1300s until moved to Constantinople by Lucar seems very reasonable.<sup>84</sup>

---

<sup>83</sup> Burkitt, 604.

<sup>84</sup> Locating the manuscript with Athanasius II at St. Saba in the early 14th century opens up the possibilities in a discussion of the provenance of Alexandrinus. McKendrick comments that "Athanasius had spent most of his active life embroiled in ecclesiastical politics at Constantinople and all the other manuscripts that he collected and destined for the patriarchate were acquired far from Alexandria" (Scot McKendrick, *In a Monastery Library: Preserving Codex Sinaiticus and the Greek Written Heritage* [London: The British Library, 2006], 31).

### *Thecla as Scribe*

With regard to the Thecla tradition, scholarship prior to the nineteenth century discussion often had little to add. In the separately-published prolegomena to his polyglot Bible (originally 1657), Brian Walton did not think identifying the Thecla of the inscription mattered—whether St. Thecla herself or a monastery dedicated to her—since the manuscript was most ancient, of equal or greater age than Codex Vaticanus.<sup>85</sup> Apart from this assessment of Alexandrinus’ comparative age, Walton said nothing further regarding Thecla.

In 1707, Grabe made a substantial contribution to the discussion of Thecla when he identified the Thecla of this tradition with the Thecla found in the letters of Gregory of Nazianzus, but he then moved to build a case that Gregory was not writing to a single person but to a convent of nuns in Seleucia.<sup>86</sup> Grabe’s argument involved a careful reading of the four surviving letters of Gregory to Thecla, noting the ambiguity of number used by Gregory when he addressed his audience. Grabe also noted Gregory’s first flight into Seleucia, which Gregory recalled in song with mention of “the maidens’ apartments of the celebrated (or famous in song) virgin Thecla.”<sup>87</sup> Finding nothing to prevent attributing the production of Alexandrinus to the Thecla—and, more specifically, the female residents—of the Seleucid monastery not long after the date of the Nicene Council, Grabe noted that in many such far removed events the proofs are scarce enough that one must instead look for likely scenarios. If Grabe was correct, then Cyril Lucar must have misunderstood the

---

<sup>85</sup> Brian Walton, *Briani Waltoni in Biblia polyglotta prolegomena* (Leipzig: Sumtibus Weygandianis, 1777), 418.

<sup>86</sup> For the argument, see section four in the prolegomena of volume one of Joannes Ernestus Grabe, *Septuaginta Interpretum* (Oxford: Theatro Sheldoniano, 1707).

<sup>87</sup> From Grabe, the reference is to τὸν παρθενῶνα τῆς ἀοιδίου κόρης, which does suggest acquaintance with a monastery dedicated to the celebrated virgin Thecla.

tradition by assigning the codex to the hand of Thecla rather than the monastery of Thecla.

In his (anonymously published) *Prolegomena* of 1730,<sup>88</sup> Wettstein acknowledged that the protomartyr who lived at the time of the Apostle Paul could not have copied a Bible before all the books of the New Testament were written.<sup>89</sup> Commenting on “another Thecla” identified by Grabe, Wettstein merely clarified that Grabe was speaking of the monastery of virgins at Seleucia consecrated to the protomartyr and not to a virgin of that name living at the time of the book’s production; additionally, he continued, Walton, Hodus, and Simon understood the codex to belong to such a monastery—and thus the inscription revealed nothing useful about the age of the manuscript.<sup>90</sup> Without saying anything further about Thecla, Wettstein considered the errors made by the scribe, noting the nonsense readings and the failure to correct mistakes that had been caught. Combined with the number of orthographic variations found in the manuscript, Wettstein concluded that a scribe so easily confused was either unskilled or, as he and others suspected, a female scribe.<sup>91</sup>

Georgius posited in 1789 that the Thecla of this tradition was the Thecla of Apollinopolis Parva in the Thebaid, the sister of the martyr Paësis, who was slain during the reign of Diocletian. According to Georgius, if Thecla was the scribe of Alexandrinus she was either an excellent scribe following a prototype of a codex of the Alexandrian church or she adopted the Greek writing style used in Alexandria

---

<sup>88</sup> Though his name does not appear on the title page, Hulbert-Powell notes that the anonymity of the *Prolegomena* is “practically disclosed” (C. L. Hulbert-Powell, *John James Wettstein 1693–1754* [London: Society for Promoting Christian Knowledge, 1937], 96).

<sup>89</sup> Wettstein, *Prolegomena ad Novi Testamenti Graeci* (Amsterdam: R. & J. Wetstenios & G. Smith, 1730), 9.

<sup>90</sup> Wettstein, *Prolegomena*, 10.

<sup>91</sup> Wettstein, *Prolegomena*, 11.

and Lower Egypt, for the writing exhibits none of the character of Thebais.<sup>92</sup>

Georgius presented what he considered a probable hypothesis of the life of the virgin from age 25 (AD 312–313, during the persecution of Galerius and Maximinus Daia) to age 60 (AD 347), to demonstrate how she could have been the sister of Paësis, the scribe of Alexandrinus around the time of the Nicene Council, and the editor who added the Eusebian canons and the titles of the Psalms by St. Athanasius.<sup>93</sup> In 1887, Gwynn challenged this hypothesis by asserting that Thecla was beheaded with her brother in AD 304 and that Alexandrinus therefore “contains matter which cannot have been in existence at the date assigned for Thecla’s death.”<sup>94</sup> Regardless, Georgius did not present any positive evidence why *any* Thecla might have been the scribe for Alexandrinus or why that *particular* Thecla should be considered the scribe; he merely presented a case that (if she survived the persecution) would prevent that Thecla from being ruled out as scribe because of chronological impossibility.

Subsequent analyses were much briefer. In 1836, Constantin Tischendorf asserted that he believed the story to be authentic and that the Codex could easily have been produced at the convent to Saint Thecla in Seleucia, but he supported this belief merely with an old adage that it is not easy for a rumor to spread.<sup>95</sup> Cowper noted in 1860 that there was no reason to doubt the sincerity of Cyril’s relaying of

---

<sup>92</sup> Augustinus Antonius Georgius, *Fragmentum Evangelii S. Iohannis Graeco-Copto-Thebaicum Saeculi IV* (Rome: Antonium Fulgonium, 1789), cxii.

<sup>93</sup> Georgius, cxi–cxii.

<sup>94</sup> John Gwynn, “Thecla (7),” in *A Dictionary of Christian Biography, Literature, Sects and Doctrines*, 4:896. Gwynn claimed that Georgius had overlooked the dating problem, but he could not have read Georgius’ full explanation to arrive at that conclusion, as Georgius explained the timeline at length.

<sup>95</sup> Constantin Tischendorf, *Vetus Testamentum Graece: Iuxta LXX Interpretes* (Leipzig: F. A. Brockhaus, 1836), 1:lxv.

the story of the manuscript;<sup>96</sup> yet there is no hard evidence to support the claim, either. To be sure, the four extant letters from Gregory of Nazianzus to a woman (or women) named Thecla do not provide any data regarding the possibility that Thecla was the scribe of any biblical manuscript.<sup>97</sup> In 2000, Kim Haines-Eitzen, while refraining from judging the veracity of the Thecla story, found it remarkable that at no time was the possibility of a *female* scribe for Alexandrinus considered implausible;<sup>98</sup> she cites, for example, Wettstein's belief that the number of scribal errors indicated the work of a female scribe. Finally, in 2003, McKendrick dismissed the Thecla story as untrue, with the desire to take the issue off the table so that "we can discredit one piece of evidence which could support an early Egyptian provenance" and so that "we can gain further insight into the context in which Alexandrinus emerged from obscurity."<sup>99</sup>

Unless more data come to light regarding the origins of Codex Alexandrinus, the Thecla story must remain an unverifiable (but unlikely to be true) tradition. Certainly the codex was not written by the protomartyr Thecla, so the initial story recounted by Roe to the Earl of Arundell in 1624 may be safely dismissed as implausible (and possibly a simple misunderstanding of Lucar by Roe). If the tradition recounted by Cyril Lucar is to be accepted, then the scribe must be a single, Egyptian woman. But as will be argued in a later chapter, there is no doubt more than one scribal hand at work in the codex. So if such a Thecla was involved, she

---

<sup>96</sup> Cowper, xx. Though producing any identifiably ancient treasure to give to England was certainly of benefit to a patriarch in a precarious political position.

<sup>97</sup> See epistles 56, 57, 222, and 223 in Paul Gallay, *Gregor von Nazianz: Briefe* (Berlin: Akademie-Verlag, 1969).

<sup>98</sup> Kim Haines-Eitzen, *Guardians of Letters* (Oxford: Oxford University, 2000), 51.

<sup>99</sup> McKendrick, "The Codex Alexandrinus," 5.



was not alone.<sup>100</sup> This palaeographical evidence suggests that the tradition received by Lucar, if based in truth, was at least partially corrupted. However, if the name Thecla is involved in the production of the codex in another way, such as by means of a Seleucid convent dedicated to Thecla as Grabe and Wettstein have discussed, further evidence will have to surface for any such theories to become more than simple possibilities or speculation.

---

<sup>100</sup> This argument was also made by Kenyon (*Handbook to the Textual Criticism of the New Testament*, 76).

## CHAPTER III

### CODICOLOGY

Codicology of Greek biblical manuscripts in the Roman or Early Byzantine periods is a relatively nascent field and scholarship in this area does not offer a well-developed methodology,<sup>1</sup> especially when compared to scholarship such as that of Medieval<sup>2</sup> manuscripts or even Coptic<sup>3</sup> manuscripts. Traditional analysis of the physical characteristics of many early biblical manuscripts/codices is often of limited use because much of the surviving material is fragmentary in nature. Additionally, older scholarship in the field of manuscript studies (whether in codicology or in her philological counterpart, palaeography) tends to be descriptively qualitative rather than quantitative; for example, descriptions such as “the letters are massive and

---

<sup>1</sup> Gullick provides a useful snapshot of codicology’s current state: “As a discipline or science the fundamental philosophical and methodological principles of codicology are still being debated. For some, codicology is an area of study more or less complete in itself: the examination of materials, tools and techniques. For others, codicology only supports the older disciplines of textual analysis, criticism and transmission, the study of scribes and scripts, the history of illumination and decoration and the history of book collections and libraries. The archaeology of the book is a seminal area of study prompting more penetrating and demanding questions by scholars from many disciplines than ever before” (Michael Gullick, “Codicology,” *Grove Art Online. Oxford Art Online* [Oxford University Press], accessed November 3, 2012, <http://www.oxfordartonline.com/subscriber/article/grove/art/T018410>).

<sup>2</sup> For some interesting work on the plethora of Medieval manuscripts, see Carla Bozzolo and Ezio Ornato, *Pour une histoire du livre manuscrit au Moyen Age: trois essais de codicologie quantitative* (Paris: Éditions du Centre national de la recherche scientifique, 1983).

<sup>3</sup> While Coptic codicology still undergoes a certain amount of improvisation, the Nag Hammadi find of 1947 was especially helpful for its development. See, for example, the first three chapters of R. McL. Wilson, ed., *The Future of Coptic Studies* (Leiden: Brill, 1978).

regular, and the columns of writing are very narrow”<sup>4</sup> are difficult to evaluate because each scholar’s opinion of what is “massive” or “narrow” is subjective.

This is not to say that the study of NT manuscripts has been entirely without codicological investigation, for in recent years there has been a growing interest in exploring the value of the physical and paratextual data of these manuscripts. Indeed, of the major uncials, Parker’s work on Codex Bezae,<sup>5</sup> Canart’s work on Codex Vaticanus,<sup>6</sup> and Jongkind’s study of scribal habits in Codex Sinaiticus<sup>7</sup> provide masterful starting points for pursuing various elements of codicological analysis. Among these studies there are useful examples of how a biblical codex can be analyzed as physical artifact, examining issues such as: writing materials and ink; page dimensions and layout/formatting; quire formation and quire or leaf numeration; readers’ helps and scholarly tools; and the study of other paratextual features unique to the given manuscripts. Additionally, purposefully codicological studies of NT manuscripts include: Wasserman’s brief but interesting codicological, palaeographical, and text critical study of  $\mathfrak{P}^{72}$  (which considers  $\mathfrak{P}^{72}$  in light of its relationship to the codex from which it was removed);<sup>8</sup> Acker’s dissertation work on

---

<sup>4</sup> Edward Maunde Thompson, *An Introduction to Greek and Latin Palaeography* (Richmond: Tiger of the Stripe, 2008), 192.

<sup>5</sup> D. C. Parker, *Codex Bezae: An Early Christian Manuscript and its Text* (Cambridge: Cambridge University Press, 1992).

<sup>6</sup> Paul Canart, “Le *Vaticanus graecus* 1209: notice paléographique et codicologique,” in *Le manuscrit B de la Bible (Vaticanus graecus 1209)*, ed. Patrick Andrist (Lausanne: Éditions du Zèbre, 2009).

<sup>7</sup> Dirk Jongkind, *Scribal Habits of Codex Sinaiticus* (Piscataway, NJ: Gorgias Press, 2007).

<sup>8</sup> Tommy Wasserman, “Papyrus 72 and the *Bodmer Miscellaneous Codex*,” *NTS* 51, no. 1 (January 2005). Utilizing the data collection and analysis of previous scholarship and synthesizing that work in a holistic manner, Wasserman was able to produce a codicological story for a key NT manuscript. The data he considered was very broad in scope, but essential to codicological investigation when available. The codicological data included: the quire structure, the manuscript dimensions, delineation of scribal hands, scribal notes, orthography, the transmission history of the codex, the (possibly changing) order of the books included in the codex, the binding, lacunae, and the use of *nomina sacra*, punctuation, and diacritical marks.

the Gothic manuscript Codex Argenteus Upsaliensis;<sup>9</sup> and Robinson's investigative inquiries into the history and provenance of the Bodmer Papyri (including the Crosby-Shøyen Codex MS 193).<sup>10</sup> Within this body of scholarly literature, each codicological analysis will necessarily vary from others based on the unique features present for the manuscript being studied and the level of access permitted to the manuscript.<sup>11</sup>

Despite the investigative variation among the aforementioned studies, a demonstrably useful seedbed of individual analyses is found in these works. When supplemented with general works on manuscript studies,<sup>12</sup> this collected body of scholarship has begun to produce a codicological context in which the fundamental questions regarding the physical and paratextual features of NT manuscripts may be drawn. It is within this context that I have chosen the codicological topics examined in Alexandrinus (materials, composition and binding, dimensions and formatting, etc.), in this chapter and scattered across the chapters that follow.

---

<sup>9</sup> Geoffrey Bernard Acker, "The Codex Argenteus Upsaliensis: A Codicological Examination" (PhD diss., University of Illinois, 1994). As an intentionally codicological study, Acker's work is situated at the heart of the matter, examining materials and construction, readers' helps, paratextual features such as the Eusebian Apparatus, and interventions in the manuscript.

<sup>10</sup> Faced with the unique opportunity of being able to investigate a findspot with supplementary information provided by interviews, the depth of Robinson's work in fleshing out the provenance and modern history of both the Bodmer Papyri and the Nag Hammadi Codices would be impossible to reproduce for many biblical manuscripts (James M. Robinson, *The Pachomian Monastic Library at the Chester Beatty Library and the Bibliothèque Bodmer* [Occasional Papers, Number 19; Claremont, CA: The Institute for Antiquity and Christianity, The Claremont Graduate School, 1990]; idem, *The Story of the Bodmer Papyri* [Eugene, OR: Cascade, 2011]; idem, "From the Cliff to Cairo: The Story of the Discoverers and Middlemen of the Nag Hammadi Codices," in *Colloque international sur les textes de Nag Hammadi* (Québec, 22–25 août 1978), ed. Bernard Barc [Bibliothèque copte de Nag Hammadi, Section "Études" 1; Québec: Les Presses de l'Université Laval, 1981]). However, variations in the story have led to questions of the reliability of Robinson's investigative work (Mark Goodacre, "How Reliable is the Story of the Nag Hammadi Discovery?" *JSNT* 35, no. 4 [June 2013]).

<sup>11</sup> Canart, for example, had physical access to Vaticanus for his work and thus could evaluate the pricking and ruling of the manuscript directly; researchers working from facsimiles or photographs often have little to no access to such subtle data.

<sup>12</sup> The general works include, for example: Eric G. Turner, *Greek Manuscripts of the Ancient World* (Princeton: Princeton University Press, 1971); Bruce M. Metzger, *Manuscripts of the Greek Bible* (New York: Oxford University Press, 1981); and Raymond Clemens and Timothy Graham, *Introduction to Manuscript Studies* (Ithaca: Cornell University Press, 2007).

As such, this codicological study of Codex Alexandrinus involves an examination of the manuscript as the vehicle for the biblical text, focusing on physical and paratextual features that not only speak to the original use of the manuscript, but also its significance to users who came in contact with it at a later date. In an effort to overcome some of the limitations of earlier work, descriptive and qualitative observations will be accompanied by quantitative data wherever possible; descriptive work regarding materials, binding, and quire structure is fairly standard among studies that examine the physical artifact, and here I have followed this general lead in providing a detailed account of the physical object. In addition, and differing from the work of my predecessors, quantitative analysis of the manuscript's *mise-en-page* elements will be used to provide objective evidence for the study's conclusions. The study includes a physical description of the Codex as an artifact: the physical composition of the book, its binding and division into volumes; the organization of the textual content by use of titles; the page and quire numbering systems used throughout the codex; and the organization of the codex into quires. Concordances of the OT and NT volumes, which summarize much of those data, are found in Appendix A.

### **The Codex**

In total, 773 leaves of the Codex Alexandrinus are extant: 630 of the OT and 143 of the NT.<sup>13</sup> Additionally, as the calculations below will demonstrate, there are at least 46 lost leaves (11 in the OT, 35 in the NT), not counting the missing Psalms of Solomon. Allowing 5 leaves for the Psalms of Solomon—now missing entirely, but

---

<sup>13</sup> Scrivener mistakenly reported there being 639 leaves present in the OT (F. H. Scrivener, *Six Lectures on the Text of the New Testament* [Cambridge: Deighton, Bell, and Co, 1875], 52), probably because he used Young's faulty page numeration (discussed below).

listed in the codex's table of contents—Kenyon estimated that the original codex was composed of 820 leaves.<sup>14</sup> If his size estimation for the Psalms of Solomon is correct, then the original size should instead be: 773 leaves (extant) + 46 leaves (lost) + 5 leaves (*Pss. Sol.*) = 824 leaves total. Kenyon's estimation of the codex's original size varies from this number for two reasons. First, Kenyon estimated that only a single leaf was missing from 2 Clement (but an estimate of 3 leaves is probably more accurate).<sup>15</sup> Second, Kenyon (as well as all other research prior to this investigation) failed to notice two of the missing leaves that are only revealed when the quire structure and Arabic folio numeration is taken into consideration; these missing leaves are discussed below.

### Materials

The leaves of the codex are of fine, thin vellum<sup>16</sup> and some filler material has been affixed to the leaves where the inner margins (particularly the upper inner corner of NT leaves) have been damaged.<sup>17</sup> Woide described a portion of the NT (*in medio libri*, but referring to the work of the second scribe in the NT) as having thicker and better quality vellum pages.<sup>18</sup> Comparing the thinner and thicker leaves, Woide noted that the ink had etched letter-shaped holes in the former while no such damage

---

<sup>14</sup> Frederic Kenyon, Sir, *The Story of the Bible: A Popular Account of How it Came to Us* (London: John Murray, 1936), 57; *The Codex Alexandrinus (Royal MS. 1 D. V-VIII) in Reduced Photographic Facsimile: New Testament* (London: Trustees of the British Museum, 1909–1957), 8.

<sup>15</sup> For this calculation, see the section on lacunae later in the chapter.

<sup>16</sup> Henry Hervey Baber, *Vetus Testamentum Græcum e Codice MS. Alexandrino: Prolegomena et notæ* (London: Richard Taylor, 1828), ii.

<sup>17</sup> The filler material, which is slightly yellow in coloration, appears to be parchment; this cannot be confirmed in all instances. I have been unable to discover best practices of manuscript restoration from the handpress era.

<sup>18</sup> Thompson made the same observation, but explicitly identifying the leaves from the beginning of Gospel of Luke to 1 Corinthians 10:8 (*Facsimile of the Codex Alexandrinus* [London: Trustees of the British Museum, 1879–1883], 4:5). In this study I have identified the first scribe of the NT as being responsible for the Gospels of Matthew and Mark and the *kephalaia* page of Luke. NT Scribe 2 then begins with the Gospel of Luke and continues until 1 Corinthians 10:8, where NT Scribe 1 takes over again.

was present in the latter.<sup>19</sup> In its entirety, the manuscript is in a state of disrepair; as early as the 19th century, Scrivener commented on the state of the codex, writing: “the vellum has fallen into holes in many places, and since the ink peels off for very age whensoever a leaf is touched a little roughly, no one is allowed to handle the manuscript except for good reasons.”<sup>20</sup> Scott McKendrick, Head of Western Manuscripts at the British Library, has commented that the vellum of Alexandrinus was prepared improperly; if what Cowper reported is true (that the ink peels from the writing surface), then this is most certainly the case.<sup>21</sup> Compared to the fourth century Codex Sinaiticus, Alexandrinus is currently in much more fragile condition; the OT books of Alexandrinus have faced greater deterioration than those of the NT. A conservation effort was made by the British Library in late 2012 to address the state of the codex prior to preparing digital images of the manuscript.

The primary ink used in the manuscript is black or brown (*atramentum*; μέλαν) that has faded to a yellowish-brown color and in some cases to a reddish hue. For rubrication a vermillion ink (*minium*, *rubrica*; κιννάβαρις, μίλτος), which has weathered the ages far better than the black/brown ink, is used. The vermillion ink has, in some areas, corroded and darkened to black, which suggests that the ink is red lead.<sup>22</sup> In the section of thicker vellum described above, the black/brown ink is thin and yellow in hue and has adhered firmly to the leaves.<sup>23</sup> Because the black ink has both faded to a brownish color and eaten through many of the pages of the

---

<sup>19</sup> M. Gottlieb Leberecht Spohn, *Caroli Godofredi Woidii Notitia Codicis Alexandrini cum variis eius lectionibus omnibus* (Leipzig: Sumtibus I. G. I. Breitkopfii, 1788), 21–22.

<sup>20</sup> Scrivener, *Six Lectures*, 52.

<sup>21</sup> Clemens and Graham, 101–103.

<sup>22</sup> Clemens and Graham, 25.

<sup>23</sup> Spohn, 22. Thompson merely described the ink in this section as “yellowish” (*Facsimile*, 4:5).

manuscript, it is likely a mordant metallic ink, prepared using an iron or copper metallic salt.<sup>24</sup> This suggests all the more that the vellum was poorly prepared, since the mordant nature of such inks provides them with greater adherence to the writing surface. The yellow ink is perhaps of a different (non-corrosive) composition, though the thicker or better-prepared vellum may have mitigated any such corrosive effect.

### Composition and Binding

Currently the codex is bound in four volumes and this arrangement is the result of at least two re-bindings (assuming the ancient codex was not unbound). The modern elements will be discussed below before considering possible ancient arrangements for the codex.

#### Modern Elements

Every book bound during the handpress era is a unique, hand-crafted item that involves a number of choices regarding its design: whether a cover was intended to be temporary or permanent; the material of the cover (leather, vellum, fabric) and boards; the decorative elements of the cover; the sewing and its supports; and the use of endleaves, just to name a few. The quire structure of Alexandrinus (discussed below) had been decided by the original scribes/designers, but those quires could be disassembled and reassembled as an owner saw fit. Since Alexandrinus was

---

<sup>24</sup> Adam Bülow-Jacobson, “Writing Materials in the Ancient World” in *The Oxford Handbook of Papyrology*, ed. Roger S. Bagnall (Oxford: Oxford University Press, 2009), 18; Turner, *Greek Manuscripts*, 23; Thompson, *Greek and Latin Palaeography*, 44–45; Sabina Magrini, “Ink,” in *BNP*; Rolf Hurschmann, “Writing Materials,” in *BNP*. Turner noted that “a brown ink has probably been mixed from an iron salt or other chemical compound, and is likely to point to a later date (iv A.D. onwards)” (19). Metzger likewise placed metallic inks at the fourth century and later, commenting that “the chemical changes [such an ink] undergoes may, in fact, liberate minute quantities of sulphuric acid that can eat through the writing material” (Metzger, *Manuscripts*, 17).



delivered to King Charles I in 1627, it is no surprise that elements of a binding from that era are present. However, the current four-volume construction of the codex is the result of a 17th century binding that was updated in the 19th century.

Baber commented in 1828 that the covers of the codex bore the insignia of Charles I and that the bindings were made of Turkish leather.<sup>25</sup> The decorative style of the design tooled into the leather covers involves a centerpiece and solid tools, which was the style when Alexandrinus arrived in England—though that was about to change:

The centrepiece style was still very much in vogue when the Stuart dynasty began in 1603 and it remained so for some time to come. A layout design based on the idea of a central focus, supported by symmetrically laid out ornament at the corners, remained a defining feature of decorated English binding work throughout the first half of the seventeenth century; the major development was a move away from large solid tools to the creation of patterns using aggregations of smaller tools... The move away from solid blocks to centre and corner decoration made up with small tools, which often produces designs with a more open or spacious feel to them, begins to be noticeable in the 1620s (though earlier examples than this are sometimes encountered) and rapidly gathers pace thereafter.<sup>26</sup>

As Baber noted, the arms block is that of Charles I, though the “same arms block is used for James I and for Charles I and occurs often”;<sup>27</sup> many examples of this arms block are found in the British Library’s database of bindings, where the initials vary (e.g. IR for James and CR for Charles).<sup>28</sup>

---

<sup>25</sup> Baber, ii. If the leather was imported from Turkey, it would be a tanned goatskin known as “Turkey leather,” and not the “morocco” of a slightly later era (David Pearson, *English Bookbinding Styles 1450–1800* [New Castle, DE: The British Library and Oak Knoll Press, 2005], 19). Because there is some confusion of nomenclature for types of goatskin even in modern scholarship, the term *goatskin* is probably best used here.

<sup>26</sup> Pearson, 64.

<sup>27</sup> Mirjam Foot, *The Henry Davis Gift*, vol. 1 (London: The British Library, 1978), 58.

<sup>28</sup> For an example, see: <http://www.bl.uk/catalogues/bookbindings/LargeImage.aspx?RecordId=020-000000920&ImageId=ImageId=40065&Copyright=BL>

According to the Curator of Bindings, “Binder John Bateman is recorded as having used this arms block but, since it is thought that arms blocks were the possession of the royal household, not the binder, its use cannot be used to identify the binder in the case of the Alexandrinus” (personal communication, August 13, 2012).

According to the Bookbinding Curator of the British Library, Philippa Marks, the corner pieces used for the codex were popular in the early 1600s but were rarely used after 1640, which would mean that the modern binding was accomplished under Charles I rather than Charles II. Additionally, the corner piece used in the tooling also appears on a Royal Music manuscript of John Coprario's fantasia suites which was commissioned by royal warrant in 1634/5 (shelf mark BL R.M.24.k.3).<sup>29</sup>

However, the story of the modern binding does not end there. In her examination of the insert on the upper cover, Marks discovered that the cover had been lifted and applied to a 19th-century binding structure. The 19th-century binding was likely added when the leaves of the codex were disassembled in the production of the full-scale facsimile. The modern leaf numeration, added in pencil, was most probably added to the manuscript prior to the disassembly and reassembly of the manuscript during the making of the facsimile.

Even prior to the creation of the full-scale facsimile in 1879–1880, however, some disassembling of the manuscript was necessary to produce photographic images of the Clementine epistles in 1856 at the request of the professors of Oxford and Cambridge. According to the diaries of Sir Frederic Madden (Assistant Keeper of Manuscripts in the British Museum in 1828 and Keeper of Manuscripts from 1837 until 1866),<sup>30</sup> the leaves of the epistles were removed from the manuscript so that Roger Fenton could photograph them. Madden recorded Fenton's belief that producing the photographs would be "no difficulty provided the leaves are taken out

---

<sup>29</sup> I am grateful to Philippa Marks for this reference.

<sup>30</sup> Regarding the two spellings of his first name, one of the palaeographer's idiosyncrasies was that he preferred the spelling *Frederic* over his given name *Frederick* and began consistently using the former spelling from 1832 and beyond (Robert W. Ackerman and Gretchen P. Ackerman, *Sir Frederic Madden* [New York: Garland, 1979], xii).

of the volume and flattened”;<sup>31</sup> however, the light required to produce suitable photographs resulted in Fenton fastening the leaves to a board and photographing them in the open air “affixed on the external wall” of the Library.<sup>32</sup>

The binding performed in the 17th century was not kind to the conservation of the manuscript. Thompson noted in the introduction to the full-size facsimile that

the margins were cut in binding the MS. after its arrival in England. The names of the several Books were originally written as principal titles as well as colophons; but, by the cutting of the upper margins, the former have, in most instances, been mutilated or lost.<sup>33</sup>

The rebinding of the manuscript would have at the very least necessitated the modification of the inner margins, which were heavily damaged and required repair.<sup>34</sup> Additionally, the upper, outer, and lower margins were likely to all have been trimmed for the rebinding. Interestingly, even the page numeration added to the upper margin of each leaf by Patrick Young—which certainly took place after the manuscript arrived in England—has been partially sheared by the binder.<sup>35</sup> For bindings created during the handpress era, there is some agreement among current scholars that quires were sewn together prior to being “trimmed in a wooden press with a plough (a sharp blade held in a wooden frame)”<sup>36</sup> and “edges were probably

---

<sup>31</sup> Diary entry of 14 February, 1856 (Frederic Madden, 1855–1856. *MS Diaries of Sir Frederic Madden: Diaries of Sir Frederic Madden (1801–1873) 168–169*. Bodleian Library, University of Oxford. *Nineteenth Century Collections Online*. Web. 25 Nov. 2012).

<sup>32</sup> Diary entry of 27 March, 1856. Madden noted that, with regard to the manuscript, “the effect of the air and sun were very powerful on it.”

<sup>33</sup> *Facsimile*, 4. For the horrors of overly zealous trimming by bookbinders of this era, see William Blades, *The Enemies of Books*, 2d ed. (London: Trübner & Co., 1880), 85–98.

<sup>34</sup> Thompson noted that the manuscript had “received injury at the back, whereby the text of some of the leaves, and particularly those at the end of [the fourth] volume, has suffered partial mutilation” (*Facsimile*, 4:4). Presumably Thompson was referring to the spine/inner margin of the manuscript here.

<sup>35</sup> While it is possible that the manuscript was trimmed more than once in England, that seems highly improbable; the more likely scenario is that Young numbered the pages before they went to the binder, if for no other reason than to keep them in order.

<sup>36</sup> Pearson, 15.

trimmed (with a plough) before the boards were attached.”<sup>37</sup> Since the codex was rebound in the modern era, it would be impossible to know for certain if sewing occurred before or after trimming.<sup>38</sup> Because of the disastrous amount of trimming



**Figure 3.1: Jost Amman’s binder’s shop, 1568**

J. Amman, *Stände und Handwerker mit Versen von Hans Sachs*, Frankfurt, 1568, fol. G1: *Der Buchbinder* (British Library, C. 27.a.40); note the worker in the foreground using a plough on what appears to be an entire book (similar illustrations are available for the 17th century as well)

that took place on the upper margin (cutting away chapter titles, quire numbers, etc.) and on the outer margin (cutting away much of the Arabic foliation), it is difficult to imagine that the trimming took place on individual leaves or quires, unless the 17th

<sup>37</sup> Mirjam M. Foot, “Bookbinding” in *The Cambridge History of the Book in Britain*, vol. 4, eds. John Barnard, D. F. McKenzie and Maureen Bell. (*Cambridge Histories Online*; Cambridge: Cambridge University Press, 2002), 624, DOI:10.1017/CHOL9780521661829.032.

<sup>38</sup> Even if that were not the case, such a determination would potentially be onerous. “Very often it is difficult to decide whether the edges were trimmed before or after sewing because during the course of the centuries the sewing has loosened and altered the alignment of the leaves” (Bernard C. Middleton, *A History of English Craft Bookbinding Technique* [New York: Hafner, 1963], 80).

century bookbinder considered those features completely without worth. It seems much more likely that the gathered quires were placed in a plough and trimmed roughly, destroying those features without deliberate effort to do so. At some point prior to trimming the pages of the manuscript were gilded (some of the gilding still remains), but it is unknown at what time this decorative feature was added.

### Ancient Arrangement

Because Alexandrinus has been rebound *twice* in the modern era, the original binding information—if the codex was bound at all in its original state—cannot be recovered with certainty. However, clues from the artifact itself have led to the advancement of a couple theories. Baber, for example, observed that the current division into four volumes must be of some antiquity since there is a great deal of wear at the beginning and end of each volume; had there been a durable *sittybus* (σιλλυβος)<sup>39</sup> for each volume, Baber believed that wear would have been prevented.<sup>40</sup> Certainly the NT volume demonstrates this kind of wear since the beginning of Matthew (and any front matter) is lost and the Psalms of Solomon and the end of 2 Clement are lost. If Baber were correct, then a greater amount of wear should also be apparent in the OT at the beginning of Genesis and the end of 2 Chronicles in the first volume; at the beginning of Hosea and end of 4 Maccabees in the second volume; and at the beginning of the Epistle to Marcellinus and end of Ecclesiasticus in the third volume.

---

<sup>39</sup> For example, see Turner, *Greek Manuscripts of the Ancient World*, 34–35 (plates 6–8 and 10); Frederic G. Kenyon, *The Palaeography of Greek Papyri* (Oxford: Clarendon Press, 1899), 23; cf. Viktor Emil Gardthausen, *Greichische Palaeographie* (Leipzig: B. G. Teubner, 1879), 53.

<sup>40</sup> Baber, ii. Since σιλλυβοι were small tags (usually attached to rolls), it is difficult to determine what he envisioned for the codex. As an aside, Turner referred in plural to “σιλλυβοι or *sittybai* (?)” (23), the latter of which does not have a Latin plural ending; Turner did not explain that orthographic peculiarity.

Whether the codex was originally gathered as one volume, four volumes, or in some other configuration, Genesis would be positioned at the beginning of a volume; so the wear at the beginning of Genesis is not surprising (the manuscript is fairly damaged up through V1.F12, with half-leaves missing). Wear at the end of 2 Chronicles is apparent, though similar wear occurs throughout the book (cf. V1.F260b, F261a, F262b, F268b, F270b, F274b, F275a, and F276b). And the wear in 2 Chronicles is not appreciably different from the end of 2 Kings (also at the end of a quire), which appears to have undergone very similar damage.

In the second volume, the beginning of Hosea is badly worn (it appears that a later hand has re-inked portions of the text), though the leaf is otherwise undamaged. The wear is similar, however, to wear found at quire boundaries. For example, V2.F9b (end of quire 38, which Hosea begins), F10a (beginning of quire 39), and F25b (end of quire 40) are all similar in condition.

The evidence from the third volume is quite the same. The Letter to Marcellinus is well-worn on the right-facing side of the first leaf and on some of the subsequent leaves; however, there are signs of equal wear at quire boundaries in this volume as well. Quire 70 (the second quire of the volume) begins with a leaf so worn as to be barely legible (V.3F10). The Periochae and Canons of Psalms that follow are also in a highly degraded condition. V3.F17b, at the end of quire 70 is very worn, though F18a from the subsequent quire is still in good condition. The final leaf of volume 3 (F118) is both worn and damaged, the upper margin of the leaf torn away. As the final book of the OT (verified by the quire numeration and Arabic folio numeration), one might expect a great deal of wear on this page if merely the OT and NT were bound separately.

In summary, Baber's suggestion that the current (as of 1828, in any case) binding showed signs of great age has some merit—after all, Alexandrinus was bound into four volumes two centuries before Baber handled the manuscript. Wear does occur where Baber predicts it should be found. However, the signs of wear Baber points to are not unique to the beginning and end of each of the volumes. Similar wear is found within many of the books and especially at quire boundaries. Perhaps Baber's observations are true but do not tell the whole story.

A 20th-century suggestion regarding the ancient binding of Alexandrinus posited that one of the inscriptions made during the lifetime of the codex may offer a clue as to how it was bound at that time. At the bottom right corner of V2.F142b there is a note scribbled in Greek minuscule, which Thompson only mentions in passing, noting that it “appears to be written in Greek cursive characters, perhaps of the 9th century.”<sup>41</sup> Baber, with less precision, merely commented that the note was recently added by a later hand, but before Alexandrinus came to England.<sup>42</sup> The note is written on an otherwise blank page, with the ending of *Bel and the Dragon* occupying a partial column on the right-facing side of the folio. The hand is a sloppy minuscule, with characters ranging from 3mm up to 1.4cm in size (see the image of the note reproduced as Figure 2.5 in Chapter 2).

In 1910, Mercati examined the note and determined that it read *ομου τετραδια μηκρα και μεγαλα ξς* (“in tutto quaternioni 66 tra piccolo e grandi”).<sup>43</sup> He noted that, while this is a calculation involving quires/quaternions, it certainly cannot be that of

---

<sup>41</sup> Thomson, *Facsimile*, 1:7.

<sup>42</sup> Baber, 170.

<sup>43</sup> Giovanni Mercati, “Un’ Oscura Nota del Codice Alessandrino,” in *Mélanges Offerts à M. Émile Chatelain*, ed. Émile Chatelain (Paris: Librairie Ancienne Honoré Champion, 1910), 79. I have confirmed this reading and am indebted to Pat Easterling for discussing this inscription with me.

the complete codex (which has over a hundred quires) and it is unlikely to simply be a terrible numerical blunder. Instead, Mercati proposed that the codex was at one time divided into two parts: volume one, containing Genesis to 4 Maccabees; and volume two, containing Psalms through the NT. As with Baber, Mercati noted the high amount of wear in the leaves at the end of 4 Maccabees and at the beginning of the Psalms (i.e., the Letter to Marcellinus which precedes the Psalms). The last quire of the first volume is actually quire 68, rather than quire 66, so Mercati explained that difficulty away by means of: (1) the concatenation of some of the smaller quires that appear in the OT to produce the smaller total; and (2) the writer of the note not having the last quire number physically in view. He believed that the note was written in the ninth century and that the codex may have been bound into a single volume to save the worn leaves or to offer the codex to the church of Alexandria (possibly in 1098);<sup>44</sup> such a format may have been more appealing at that time, since—though pandects remained “always a rarity” until approximately AD 1200<sup>45</sup>—single-volume Bibles were the predominant style of large-format Bibles in the seventh century and later.<sup>46</sup> But the previous two-volume configuration, according to Mercati, may be indicated by the contemporary (very early, but not by the first hands) table of contents on V1.F4a (see the Table of Contents section below for the layout of that page). In the first column the books listed are Genesis through 4 Maccabees; the second column lists Psalms through the NT, Clementine letters,

---

<sup>44</sup> For reference to this date, see the notes on the inscription found on V1.F4a as described in Chapter 2.

<sup>45</sup> Michelle P. Brown, ed., *In the Beginning: Bibles Before the Year 1000* (Washington DC: Freer Gallery of Art & Arthur M. Sackler Gallery, 2006), 45, 65–66; cf. T. C. Skeat, “The Codex Sinaiticus, the Codex Vaticanus, and Constantine,” *JTS* 50, no. 2 (1999): 616.

<sup>46</sup> Bernhard Bischoff, *Latin Palaeography: Antiquity and the Middle Ages*, trans. Dáibhí Ó Cróinín and David Ganz (Cambridge: Cambridge University Press, 1990), 24–25. Since Alexandrinus was *already* a large-format Bible, the contemporary Western approach of assembling large-format Bibles in a single volume may have served as a cultural push.



and Psalms of Solomon.<sup>47</sup> Why create an uneven list of book titles (with space at the bottom of the first column) if not to indicate the layout of the two volumes?

Mercati's theory on the antiquity of a two-volume codex has the same weakness as Baber's four-volume proposal: highly worn leaves in the manuscript are not restricted merely to volume boundaries. However, Mercati's supporting arguments using the contents page on V1.F4a and the inscription on V2.F142b raise the merit of his two-volume theory. Even though Mercati's hypothesis of the 66/68 quire number discrepancy in the inscription is not entirely satisfying, it remains the most reasonable explanation of the note. Additionally, Mercati's suggestion that it was a single-volume text while in the hands of the Alexandrian church is certainly borne out by the Arabic page numeration, which is sequential throughout the entirety of the manuscript. Additionally, some reconfiguration of the manuscript must have taken place between its creation and the Arabic folio numeration in the 14th century. For quires 45 and 46, the former of which appears to have an original quire signature, were in reversed order when the Arabic numeration took place. Re-assembly of the quires into a new (single) binding prior to the Arabic folio numeration provides a suitable explanation for how these two quires could have been shuffled despite the correct quire numeration.

It is possible, then—and very reasonable, I would suggest—that both Baber and Mercati are correct: very early in its history (possibly even originally) Alexandrinus was bound in two volumes (volume one: Genesis through 4

---

<sup>47</sup> Mercati commented on a possible reason for this layout: “Sarà puramente casuale una tale divisione? È difficile crederlo. L'avvicinamento dei libri didattici al N.T. e l'attenzione di dividere il codice non già verso il mezzo tra i profeti e gli agiografi, come veniva naturale, ma molto dopo, producendo una differenza notevole di volume, fanno pensare che a bella posta siasi voluto riunire al Nuovo Testamento i libri didattici e questi soli, probabilmente perchè l'uso più frequente di essi suggeriva simile comodità” (81).

Maccabees) and a table of contents page was appended to the first volume; the Alexandrian church either acquired the codex in a single volume or rebound it herself prior to the Arabic page numeration; the single-volume codex was offered as a gift to England by Cyril Lucar (Roe, after all, described it as a singular codex);<sup>48</sup> and when the codex came to England it was bound in four volumes and was handled in that format for 200 years. Physical examination of the most worn leaves of the codex could be used to verify or reject this binding history, but the fragile condition of the OT volumes renders access for such an examination unlikely.

## Dimensions and Formatting

### General Features

In its present state, Thompson recorded the dimensions of the codex at 10½ inches x 12¾ inches<sup>49</sup> (breadth followed by height); Turner recorded the dimensions more precisely as 26.4cm x 31.6cm.<sup>50</sup> These measurements place the breadth to height proportions at 1:1.24 (or roughly 4:5). The codex has suffered alteration at the hands of the bookbinder(s)<sup>51</sup> such that the full, original dimensions of the manuscript are unknown. With what remains, however, the manuscript is categorized into Turner's Group II of parchment codices (those of 30–35 cm in height), a group of relatively large codices that fall roughly within the 4th to 7th century in age.<sup>52</sup>

---

<sup>48</sup> Thomas S. Pattie, "Creation of the Great Codices," in *The Bible as Book: The Manuscript Tradition*, ed. John L. Sharpe III and Kimberly Van Kampen (London: The British Library and Oak Knoll Press, 1998), 69.

<sup>49</sup> *Facsimile*, 4:3.

<sup>50</sup> Eric G. Turner, *The Typology of the Early Codex* (Eugene, OR: Wipf and Stock, 1977), 134. The difference in measurements is 0.4cm x 0.785cm, with Turner's measurements being smaller.

<sup>51</sup> This practice, mentioned above, is common enough to need no further comment.

<sup>52</sup> Turner, *Typology*, 26.

Regarding the *mise-en-page*, the text of the codex is written in two columns per leaf through all four volumes with an equal number of lines of text per column on a given page; this same layout is followed by indexes such as the *kephalaia* lists of the Gospels. Where a page does not have two full columns of text (due to the ending of a book or epistle), this formatting is maintained regardless. Tailpiece art is scaled to conform to the column boundaries used for text. Marginal notations include: the quire numbers (where they are extant) written in the middle of the upper margin on the first page of each quire; chapter or section numbers and Eusebian Apparatus number pairs written in the left margin of text columns; and chapter numbers and titles (where extant) written in the upper margin of the Gospels. Arabic page numbering, when not trimmed by the bookbinder, is found on the left-facing side of each leaf, in the lower left corner.<sup>53</sup>

The characters in each column of text generally conform to and fill out a rectangular shape, except for tables of contents (such as the *kephalaia* lists), text that is specially formatted into lists (e.g., genealogies such as that of Jesus found in V4.F22b.c2 or that of Israel found in V1.F246a) or in metered form (e.g., the format of poetic books such as Proverbs, V3.F64b-F78a). Characters at the end of lines are often reduced in size to conform to the writing area of each column; enlarged characters extruded into the left margin of either column often do not conform to those same boundaries. The dimensions of the columns are determined by the ruling performed by the scribes, including not only the horizontal ruling but also the left

---

<sup>53</sup> These numbers are generally more visible on the full-size facsimile, which appears to have better captured the edges of the leaves.

and right vertical boundaries. In the facsimiles these vertical rulings are sometimes visible, but most often they are difficult or impossible to detect.<sup>54</sup>

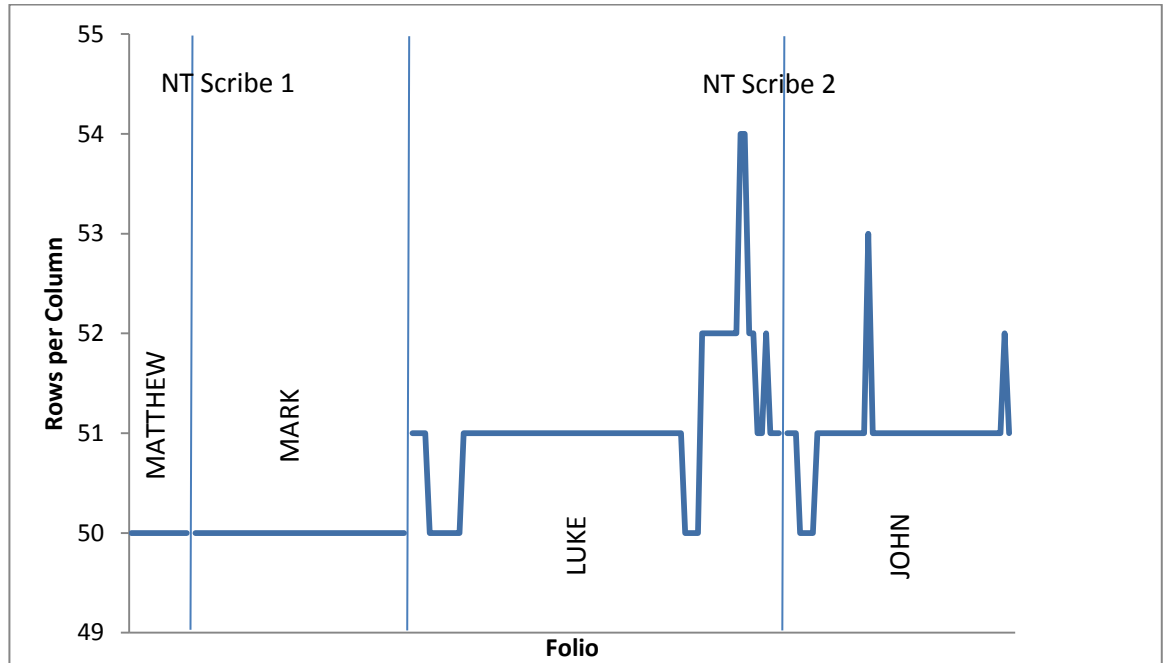
### Statistical Analysis of Formatting Features

There are a number of quantifiable features in the manuscript that lend themselves to objective data analysis unavailable to analysis of more subjective features such as subtle differences in letter shapes. While subjective features should not be overlooked (and are, in fact, useful in forming hypotheses regarding delineation of scribal hands), objective analysis provides useful input into the analytical process. The first and most obvious formatting features to be examined in the Gospels include tracking a scribe's use of number of rows per column of text and the number of letters written per row. Excluding incomplete columns (at the end of a book or epistle) and *kephalaia* columns, a plot of the number of rows per column follows in Figure 3.2. The figure shows very clearly that the row count per column in Matthew and Mark remains a constant 50 rows/column while the row count becomes unstable in Luke and John (ranging from 50–54 rows/column). The data regarding the number of rows per column thus support the hypothesis that the scribe responsible for copying the Gospels of Matthew and Mark did not also copy Luke and John. Since three scribes will be considered in the analysis below, it is worthwhile noting that the habit of Scribe 3 (to whom is attributed only the Apocalypse in the NT) was to follow a 50 rows/column format with general, but not complete, consistency. Of the 9 leaves and 34 complete columns of the Apocalypse, only three of the complete

---

<sup>54</sup> The rulings are discussed in more detail in the next chapter.

columns vary from the 50 row count: one column of 49 rows on V4.F131b.c1; and two columns of 51 rows on V4.F133a.



**Figure 3.2: Number of rows per column in the Gospels of Alexandrinus**

The number of letters per row remains fairly uniform across the Gospels, the mean (standard deviation [SD]) values being: 22.89 (3.18) in Matthew, 22.68 (2.79) in Mark, 21.43 (2.39) in Luke, and 21.91 (2.60) in John. While minimally different, NT Scribe 2 appears to have a slightly lower number of letters per row.

Based on patterns occurring in the palaeographical and paratextual features described in the chapters that follow, I suspected that the previous delineations of scribal hands in the Gospels, as determined by Woide (1786), Thompson (1879), Kenyon (1909), and Cavallo (1967) were most likely correct. The view that two hands were at work in the Gospels is in contrast to the view of Skeat and Milne (1938)—and the current scholarly consensus that upholds their conclusion—that

there is one hand at work in the canonical NT books (and a second hand for the Clementine epistles). The disagreement between these opposing views is rooted in subjective palaeographical grounds, and I believe that gathering quantifiable data regarding the formatting habits of the scribes benefits the discussion by adding objective analysis.

Further, while Woide, Thompson, Kenyon, and Cavallo are in agreement regarding the delineation of scribes in the Gospels, they are in disagreement regarding the number of hands found in the entirety of the NT: Woide and Thompson detected two hands at work in the NT volume of the codex, Kenyon detected four, and Cavallo identifies three (see Table 5.2). In order to determine a stratification of the NT to be used for testing, I evaluated the palaeographical arguments posed by each of these scholars and also collected and analyzed pilot data across the width of the NT (see Appendix C). As a result of that preliminary analysis, I concluded that Kenyon's delineation of the NT scribes showed the most promise for statistical analysis.<sup>55</sup>

Using the full-scale facsimile, I recorded 21 measurements per folio in the fourth volume of the codex using a stratified random sample with Kenyon's scribal delineations as the stratification factor; the number of samples for each scribe was proportional to the number of folios assigned to each scribe.<sup>56</sup> The measurements (as defined in Appendix C) were used to make the layout feature calculations listed below in Table 3.1.

---

<sup>55</sup> Of the four scholars (i.e., Woide, Thompson, Kenyon, and Cavallo), only Kenyon held to a third scribe in the canonical books of the NT. The preliminary investigation appeared to uphold Kenyon's determination that a separate hand was responsible for copying the Apocalypse (his Scribe 5, my NT Scribe 3).

<sup>56</sup> The details of this data collection and analysis are described in Appendix C.

**Table 3.1: Calculations for the different layout features**

Layout Feature	Calculation
<i>Upper Margin</i> : the distance from the upper edge of a leaf to the top of un-enlarged characters in columnar text.	The mean of the measurements for the Upper Left margin, the Upper Middle margin (measured at the UL corner of column 2), and the Upper Right margin.
<i>Lower Margin</i> : the distance from the lower edge of the leaf to the bottom of un-enlarged characters in the columnar text.	The mean of the measurements for the Lower Left margin, the Lower Middle margin (measured at the LL corner of column 2), and the Lower Right margin.
<i>Inner Margin</i> : the distance from the inner edge of the leaf to the inner edge of un-enlarged characters in the columnar text.	The mean of the measurements for the Inner Top margin, the Inner Middle margin, and the Inner Bottom margin.
<i>Outer Margin</i> : the distance from the outer edge of the leaf to the outer edge of un-enlarged characters in the columnar text.	The mean of the measurements for the Outer Top margin, the Outer Middle margin, and the Outer Bottom margin.
<i>Column Width</i> : the distance from the leftmost non-enlarged, non-extruded character to the rightmost character (including final <i>nu</i> ).	The mean of the top of the column width and the bottom of the column width.
<i>Column Height</i> : the distance from the uppermost non-enlarged character to the bottommost non-enlarged character.	A single measurement along the left side of a column, shifted to the right to avoid an enlarged character.
<i>Column Area</i> : the notional writing area for a given column of text	The column width multiplied by the column height.
<i>Space Between Columns</i> : the space between the notional writing areas of the two columns.	The mean of the Space Top, Space Middle, and Space Bottom.
<i>Total Written Area</i> : the combined area of the two notional columns and the space between columns.	The three areas are added together.

The measurements used in the calculations for Table 3.1 ignored enlarged characters and *ekthesis*, moving to the next available “normal” (non-enlarged, non-extruded) character to make a measurement. The abbreviated final *nu* (the linear *nu* at the end of a line of text) was included in measurements. For the purpose of statistical calculations, the definitions for margin size, column width, etc. are

“arbitrary” in the sense that consistency in measurement (from one leaf to the next) is all that is necessary to ensure statistical validity.

For this analysis I have labeled the scribes as NT Scribe 1 (Kenyon’s Scribe 3), NT Scribe 2 (Kenyon’s Scribe 4), and NT Scribe 3 (Kenyon’s Scribe 5). Because of the highly degraded condition of the Clementine epistles,<sup>57</sup> they were not included in this analysis. From those data, a profile of the *mise-en-page* for the NT (which is reasonably representative of the codex as a whole) may be observed in Table 3.2:

**Table 3.2: Summary of Measurements in V4, mean (SD)**

Measurement (in cm/cm <sup>2</sup> )	NT Scribe 1 / Scribe 3	NT Scribe 2 / Scribe 4	NT Scribe 3 / Scribe 5	Overall
Col. 1 Width	8.55 (0.371)	8.74 (0.314)	9.03 (0.302)	8.70 (0.352)
Col. 1 Area	192.75 (8.790)	203.84 (8.461)	204.27 (10.977)	200.22 (10.093)
Col. 2 Width	8.68 (0.384)	8.83 (0.301)	9.35 (0.346)	8.82 (0.365)
Col. 2 Area	196.25 (9.804)	206.93 (8.094)	212.33 (8.836)	203.79 (10.209)
Col. Spacing	2.45 (0.213)	2.43 (0.195)	2.50 (0.210)	2.44 (0.200)
Inner Margin	1.48 (0.501)	2.18 (0.631)	1.24 (0.548)	1.89 (0.687)
Lower Margin	5.91 (0.497)	5.34 (0.453)	5.40 (0.479)	5.53 (0.534)
Outer Margin	4.29 (0.668)	3.50 (0.662)	3.06 (0.402)	3.73 (0.762)
Upper Margin	2.71 (0.373)	2.20 (0.433)	3.06 (0.193)	2.42 (0.492)
Writing Area	444.32 (14.454)	467.67 (13.446)	473.31 (17.450)	460.38 (17.936)
Writing Area H	22.58 (0.401)	23.38 (0.348)	22.69 (1.136)	23.07 (0.588)
Writing Area W	19.68 (0.508)	20.00 (0.425)	20.87 (0.470)	19.95 (0.536)

The general profile of the NT volume (not taking into account the differences between scribes) is displayed in the rightmost column of Table 3.2. According to this profile, the average total writing area on a leaf of the NT is found by these calculations to be 19.95 cm x 23.07 cm; Turner calculated the written area to be 20 cm x 22.4 cm,<sup>58</sup> which is very close. The margins, which are necessarily smaller for being trimmed by the bookbinder in England, are such that the inner margin is

<sup>57</sup> Based on the photographs produced by Fenton, it appears that prior to the photography the Clementine epistles were treated with a chemical agent (applied with a brush) in order to reveal the text. Such treatments originated in the 19th century but often had the terrible side effect of, over time, darkening the treated areas into illegibility (Clemens and Graham, 104–105). Fortunately, the color images now available on-line have made previously illegible (facsimile) text available to the world of scholarship once again.

<sup>58</sup> Turner, *Typology*, 134.



approximately half the size of the outer margin and the upper margin is roughly half the size of the lower margin; in Greek biblical manuscripts lower margins tend to be larger than upper margins, so this exhibits the common practice. The writing area of the left column (Column 1) is consistently slightly smaller than that of the right (200.22 cm<sup>2</sup> vs. 203.79cm<sup>2</sup>) since the left column is slightly narrower (8.70cm vs. 8.82cm); the practice of having a right column that is wider than the left column is constant across all three scribes (on both right-facing and left-facing sides of the leaves). Among the scribes there is also a fairly consistent use of space between the two columns.

In order to determine the significance level of the different measurements collected for Table 3.2, the data for each of the scribes were compared with the data for each of the other scribes and the p-values were calculated using simple linear regression (see Table 3.3). For this analysis, the paratextual feature data (which are dependent variables) are measured against the scribes (the independent variable). Statistically significant values (those with a p-value  $\leq 0.05$ ) are marked with an asterisk in the table.

**Table 3.3: Measurement p-values among scribes**

Measurement	Scribe 1 vs. Scribe 2	Scribe 1 vs. Scribe 3	Scribe 2 vs. Scribe 3
Column 1 Area	<0.0001*	0.0116*	0.9209
Column 1 Width	0.0148*	0.0006*	0.0211*
Column 2 Area	<0.0001*	<0.0001*	0.1300
Column 2 Width	0.0553	<0.0001*	0.0003*
Inner Margin	<0.0001*	0.2776	<0.0001*
Lower Margin	<0.0001*	0.0144*	0.7479
Outer Margin	<0.0001*	<0.0001*	0.0132*
Upper Margin	<0.0001*	0.0018*	<0.0001*
Space Between Columns	0.7063	0.5466	0.4067
Total Writing Area	<0.0001*	0.0001*	0.4138
Writing Area Height	<0.0001*	0.7956	0.1161
Writing Area Width	0.0026*	<0.0001*	<0.0001*

Because Scribe 2 varied his number of rows per column and Scribe 1 did not, it is expected that the mean writing area height values between these two scribes would differ and be statistically significant. That is in fact what the analysis indicates; however, while variation in these values may be statistically significant, they may not be *important* in determining the work of different scribal hands. Thus other indicators of a change in hands were investigated as well.

Surveying the statistically significant differences in the table above, a few observations may be made immediately regarding the habits of the three scribes with respect to page layout:

1. All three scribes differ in their use of the upper margin, the outer margin, the total writing area width, and the width of column one.
2. Scribe 1 is uniquely differentiated from the other scribes with regard to: column one area; column one width; column two area; use of the lower, outer, and upper margins; and total writing area. These data indicate that this hand uses the smallest writing area of the three. His use of the inner margin is the same as Scribe 3 but markedly different from Scribe 2 (1.48cm [0.501] vs. 2.18cm [0.631]).
3. Scribe 2 is uniquely differentiated from the other scribes with regard to: column one width; use of inner, outer, and upper margins; and total writing width. These data indicate that Scribe 2 begins his text significantly closer to the upper margin and farther from the inner margin than the other two hands. His use of the outer margin (3.50 cm [0.662]) is in between that of Scribe 1 (4.29cm [0.668]) and Scribe 3 (3.06cm [0.402]). The significant difference in writing area height between Scribe 1

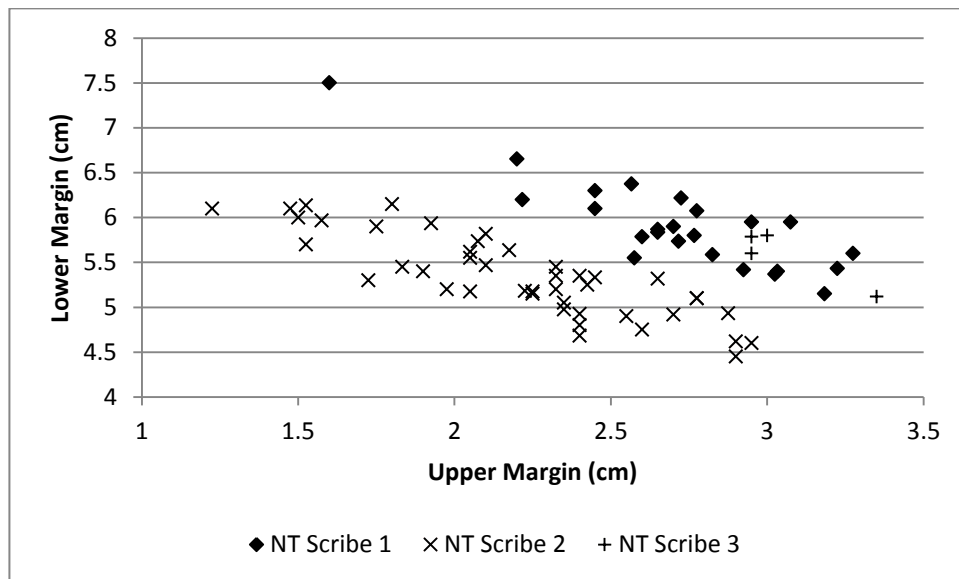
and Scribe 2 is likely a result of the varying number of rows used by Scribe 2.

4. Scribe 3 is uniquely differentiated from the other scribes with regard to: column one width; column two width; use of the outer and upper margins; and total writing area width. Of the three scribes in the NT, Scribe 3 uses the widest writing area, on average 1.19cm wider than the area used by Scribe 1 and 0.87cm wider than the area used by Scribe 2. That difference of width is distributed across both columns of text: Scribe 3's first column is on average 0.48cm wider than that of Scribe 1 and 0.29cm wider than that of Scribe 2; and Scribe 3's second column is on average 0.67cm wider than that of Scribe 1 and 0.52cm wider than that of Scribe 2. This scribe also uses much more upper margin than the other two scribes.

All three scribes were uniform in their use of spacing between columns: Scribe 1 with spacing of 2.45cm (0.213); Scribe 2 with spacing of 2.43cm (0.195); and Scribe 3 with spacing of 2.50cm (0.210). There is no significant difference in these measurements.

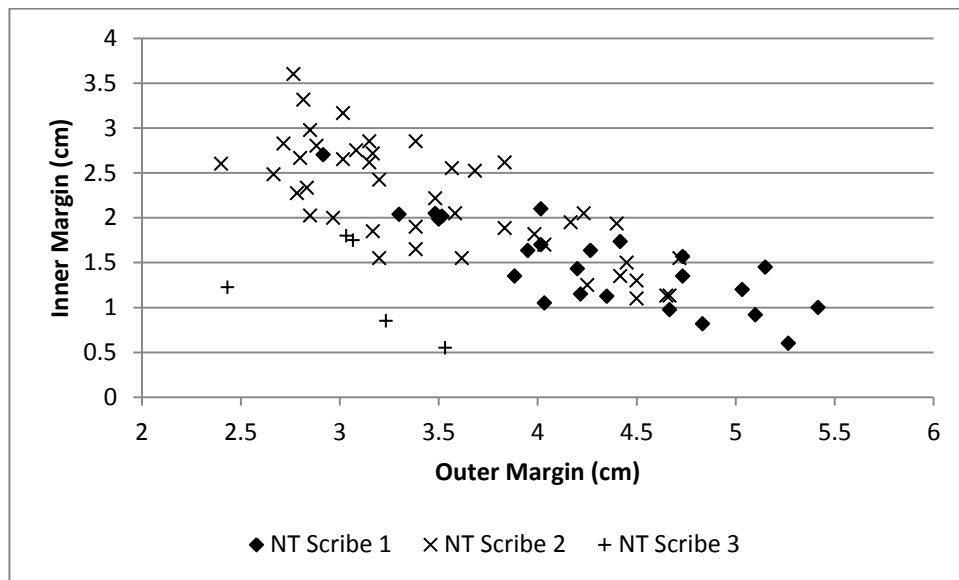
From the observations above, there is a statistically significant difference between the scribes regarding the use of the upper and outer margins. Scatterplots using the marginal measurements of each of the scribes provide a useful visual reference to how each scribe utilized the writing area of his leaves. In Figure 3.3 (plotting the upper margin size against the lower margin size) the separation of Scribe 1 and Scribe 2 is immediately apparent. With both scribes the trend is for lower margin size to decrease as upper margin size increases, which one would

expect so long as the writing area is of a relatively fixed area. However, the pattern of Scribe 1 using larger margin space than Scribe 2 is immediately visible in the figure. Scribe 3 shares some of the same features as Scribe 1 in this plot, though lingering at the high end regarding the size of the upper margin (as Table 3.2 confirms).



**Figure 3.3: Scatterplot of upper margin vs. lower margin**

In Figure 3.4 (plotting size of outer margin against size of inner margin) the separation of the scribal hands is also apparent, though less dramatically so. As expected of scribes maintaining a relatively constant writing area, as the outer margin for each scribe increases the inner margin decreases. Again, however, the pattern for each hand is revealed by the clustering of the data points: Scribe 3 in the lower left portion of the graph and Scribe 1 below and to the right of Scribe 2.

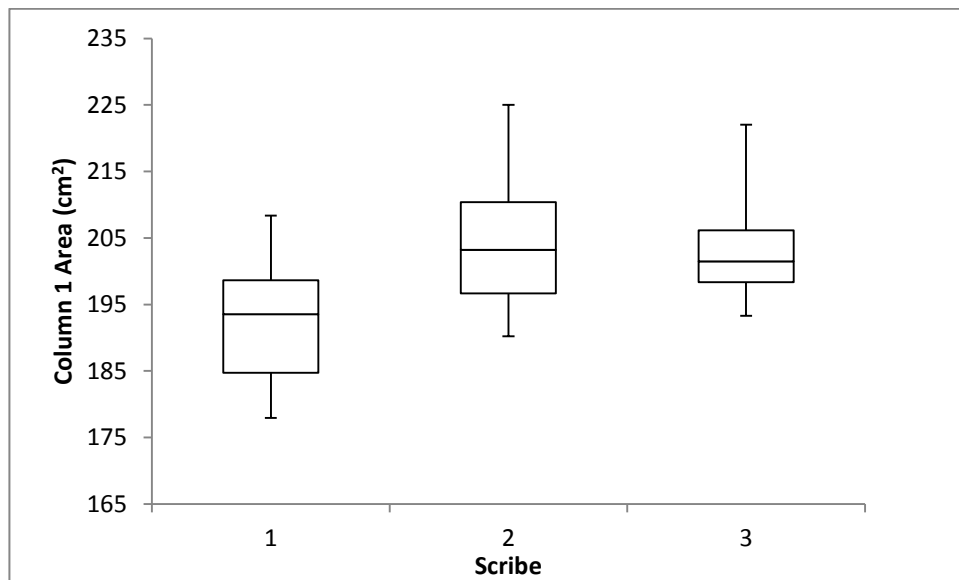


**Figure 3.4: Scatterplot of outer margin vs. inner margin**

Regarding the use of writing space in both columns of text, the data from Table 3.2 clearly indicate a significant delineation between scribes based on those measurements. While the number of rows per column might vary between scribes (or within the practice of a specific scribe), the writing area is determined both by: the number of rows multiplied by the space between them; and the width of each column. Because the row size (height, not length) of a scribe may be unique to that scribe, two scribes might vary in number of rows per column but ultimately share the same size writing area. As the box and whisker plots of Figure 3.5 (column one area) and Figure 3.6 (column two area) illustrate, the writing areas used by each scribe do vary.<sup>59</sup> Because Scribe 1 and Scribe 3 both use 50 rows per column (the

<sup>59</sup> Boxplots are a useful method of describing a distribution of numbers such that center and spread of the distribution are immediately accessible to the viewer. The boxplots used here display the minimum and maximum values (the lines extending above and below the central boxes), the quartiles (spanned by the central box) and the median value (the line dividing the central box) for each scribe. The beauty of using boxplots in this situation is that they present the variability of practice for each scribe in a side-by-side comparison. In Figure 3.5, for example, the narrower central box for NT Scribe 3 demonstrates the practices of a more precise scribe with regard to the area of the first column, as compared to the other two scribes. Viewing the plots for each scribe as pairs (Figures 3.5 and 3.6) provides the reader with a visual means of profiling the habits of each hand. For more information on boxplots, see Appendix C.

former does so ubiquitously while the latter shows slight variation), this comparison of writing area in each column is particularly meaningful; in both columns Scribe 3 utilizes more writing area than Scribe 1. Interestingly, all three scribes utilize slightly more space in the second column (which is always wider than the first

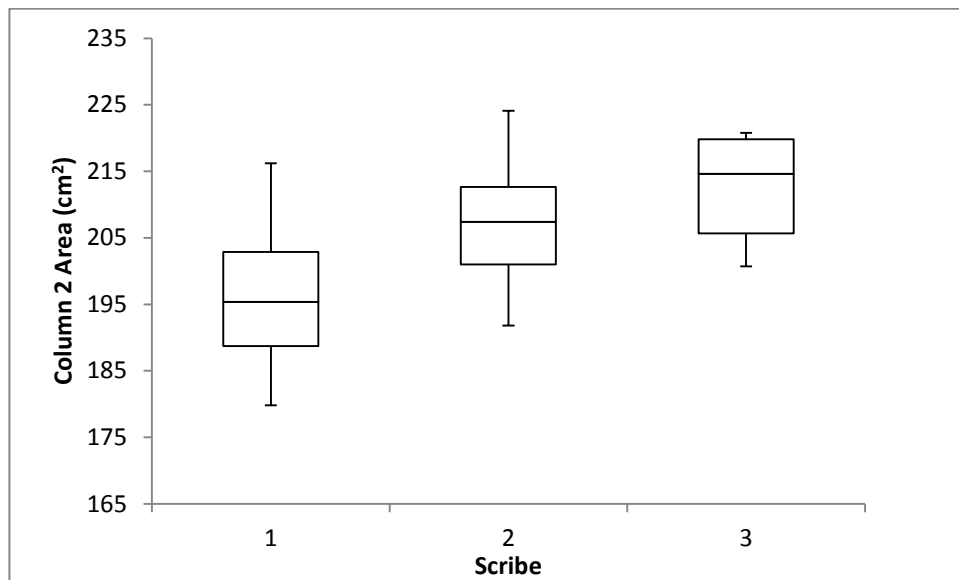


**Figure 3.5: Column one area for each NT scribe**

column), whether on the flesh-side or hair-side side of the leaf. To borrow a woodworking term, is it possible that three scribes—each with different writing habits—each used a “story stick”<sup>60</sup> created from a master story stick such that their first column was always slightly narrower than their second column? Given the other variants between the scribes, this constant is intriguing.<sup>61</sup>

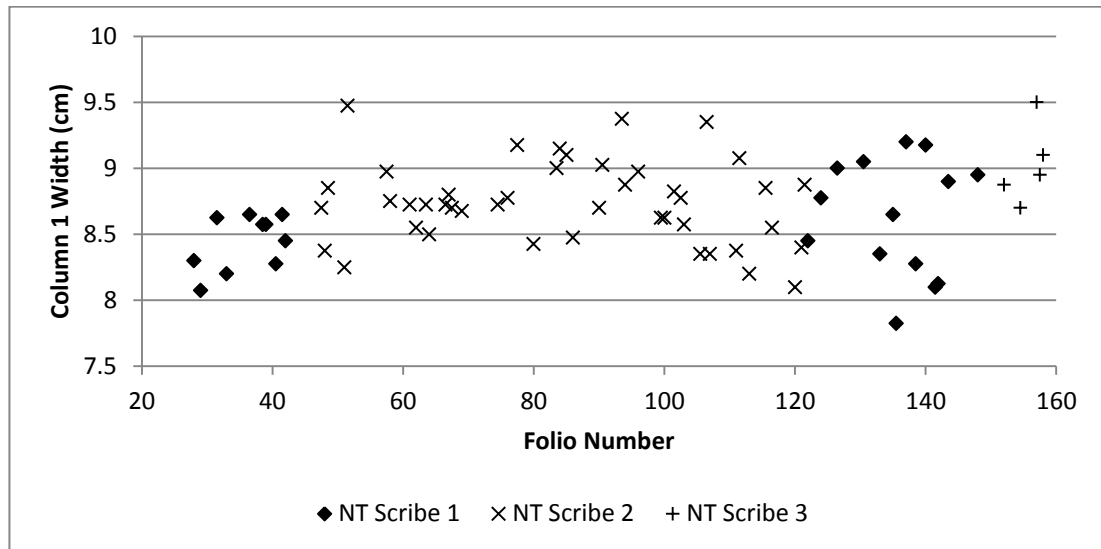
<sup>60</sup> A story stick is simply an object (typically a wooden stick) that has been marked with one or more distances and is then used as a template for repeated measurements of the same size(s).

<sup>61</sup> A common ancestor to each scribe’s story stick might also explain the relatively constant use of space between columns used by each scribe.

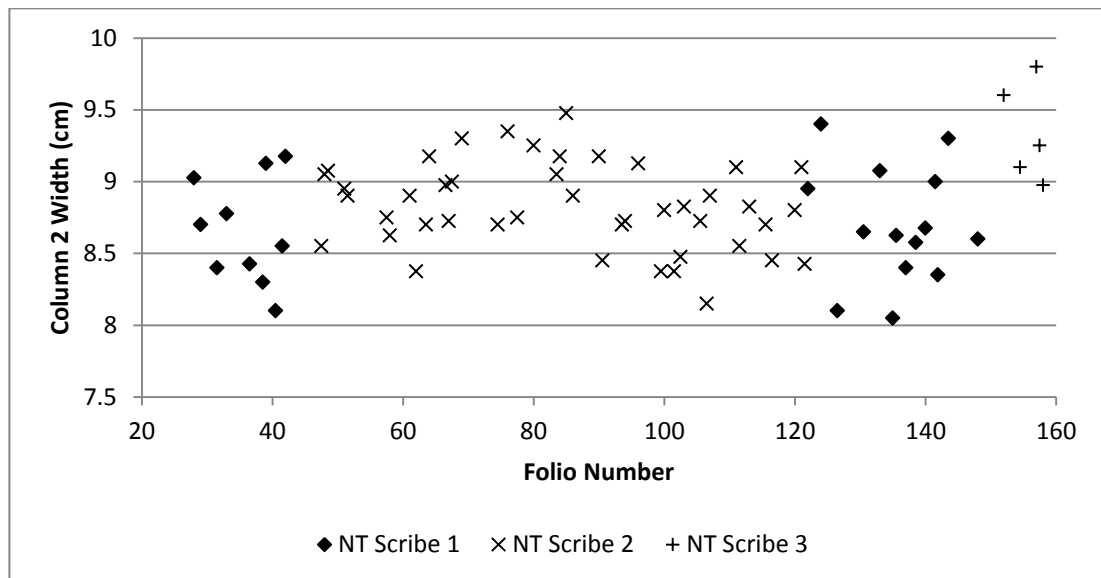


**Figure 3.6: Column two area for each NT scribe**

As Table 3.2 indicates and the analysis above demonstrates, there is an increase in column widths from Scribe 1, to Scribe 2, to Scribe 3. Despite the fact that the scribes appear in the NT in the order of Scribe 1, Scribe 2, Scribe 1, Scribe 3, is there any chance that some general trend in the manuscript is that the column widths continue to grow as the number of leaves progresses? If so, then conceivably the differences between Scribe 1 and Scribe 3 could be artificially induced by some unknown factor. As the scatterplots in Figures 3.7 and 3.8 below demonstrate, no such progressive lengthening of column widths occurs with each new leaf of the quire; if there were a progressive lengthening of column widths, then there would be a linear relationship between folio number and column width even within the work of each scribe. That is, the distinction between Scribes 1 and 3 cannot be eliminated by any such progressive factor.



**Figure 3.7: No indication of progressive growth in Column 1 size**



**Figure 3.8: No indication of progressive growth in Column 2 size**

In summary, the statistical analysis of the formatting features used in the NT portion of the manuscript confirms the differences in scribal hands suggested by the palaeographical and paratextual feature analysis detailed in Chapter 4. The delineation of scribal hands that has been confirmed:



1. Scribe 1 in the Gospels of Matthew and Mark; continuing from  
1 Corinthians 10:8 through Philemon;
2. Scribe 2 in the Gospel of Luke through 1 Corinthians 10:8;
3. Scribe 3 in the Apocalypse.

This cumulative argument for the identification of each of the scribes is summarized in Chapter 5 (Scribes).

### **Contents**

As was discussed above, Alexandrinus is currently bound in four volumes, the first three containing the Old Testament and the fourth containing the NT and the Clementine Epistles. The extant books of Alexandrinus are as follows:

- Volume 1: Genesis, Exodus, Leviticus, Numbers, Deuteronomy, Joshua, Judges, Ruth, 1 and 2 Samuel, 1 and 2 Kings, and 1 and 2 Chronicles;
- Volume 2: Hosea, Amos, Micah, Joel, Obadiah, Jonah, Nahum, Habakkuk, Zephaniah, Haggai, Zechariah, Malachi, Isaiah, Jeremiah, Baruch, Lamentations, Epistle of Jeremy, Ezekiel, Daniel (with Susanna and Bel and the Dragon), Esther, Tobit, and Judith in volume two; 1 and 2 Esdras, 1–4 Maccabees;
- Volume 3: Athanasius' Epistle to Marcellinus, Eusebius' Hypothesis of Psalms, Periochae and Canons of Psalms, Psalms, Canticles, Job, Proverbs, Ecclesiastes, Song of Songs, Wisdom, and Ecclesiasticus;
- Volume 4: Matthew (beginning with the end of 25:6), Mark, Luke, John, Acts, James, 1 Peter, 2 Peter, 1–3 John, Jude, Romans, 1 and 2 Corinthians, Galatians, Ephesians, Philippians, Colossians, 1 and 2

Thessalonians, Hebrews, 1 and 2 Timothy, Titus, Philemon, Revelation, and 1 and 2 Clement.

### Lacunae

Most of the lacunae in the codex are easy enough to locate by simply identifying gaps in the contents of the biblical books. Where prefatory, variable-length, or end matters are concerned, calculations are more tentative. In total, there are more than 46 leaves that have been lost from the manuscript. In the NT there are 7 lacunae: of the first 6 there are 35 leaves now lost; no portion of the final lacuna (the Psalms of Solomon) remains, so the size of this loss can only be estimated. In the OT, there are three lacunae constituting a total of 11 missing leaves: the first is the loss of a single leaf; the second (in Psalms) can be calculated at 9 leaves; and the third, which is one missing leaf, can be inferred from the quire structure and Arabic page numeration.

In the OT portion of the codex there is no evidence of any prefatory material occurring before Genesis; thus, there are only three known lacunae. The first lacuna occurs in volume 1, where V1.F172 (containing 1 Sam 12:17–14:9) is missing but has been replaced by a blank leaf numbered at the top of the right-facing side by a modern hand as page 168. The second column on V1.F171b nearly finishes verse 17 (ending at *αιτησαντες εαυτοις βασι*). In the bottom margin of that same page, Young scribbled a note in Latin to indicate the lacuna that followed. V1.F173a begins midway through 1 Samuel 14:9 with *και ου μη αναβωμεν*. The missing (now replaced) leaf is consistent with the Arabic numbering of the 14th century: the preceding leaf is numbered 167 and the following leaf is numbered 169.

The second OT lacuna occurs in volume 3, with the loss of Psalms 49:20–79:11 between F25 and F26. As with the previous lacuna, Young scribbled a Latin note in the lower bottom margin of F25b to indicate that a lacuna followed. F25b ends with a complete verse 19 and F26a begins with the end of Psalm 79:11 (τας κεδρους του θυ). Young's pagination did not attempt to calculate the size of this lacuna and thus F25 is numbered 546 while F26 is numbered 547. The Arabic folio numeration, however, must have been added before the loss of the missing Psalms, since F25 must be numbered 540 (based on numeration that precedes it) and F26 must be numbered 550 (by counting backwards from extant page numeration that follows). This indicates that the lacuna consists of 9 missing leaves. This calculation is also consistent with the quire size and numeration for this portion of the text. Throughout the third volume of the codex the standard quire size is 8 leaves; if the missing quire 72 contained 8 leaves and there is only one missing leaf to the 7-leaf quire 73, then 9 leaves must be missing according to that numeration as well.

The third OT lacuna consists of a missing leaf between the end of 2 Esdras and the beginning of 1 Maccabees. This lost leaf is not reported in previous scholarship and is explained in the analysis of the quire structure that follows.

The NT volume of the codex (volume 4) begins with a lacuna. The first extant page of this volume by an original hand (V4.F2, since F1 is a modern addition) begins mid-way through Matthew 25:6, starting with *εξερχεσθε εις απαντησιν αυτου*. Patrick Young, Librarian to King Charles I, estimated that 25 leaves were wanting from the manuscript here and thus began his page numeration of V4.F2 at 26. Cowper believed that Young's pagination was the result of a mistake,

stating in 1860 that “not more than sixteen or seventeen folia are missing.”<sup>62</sup> But Young likely used the Arabic page numeration (discussed in detail below) to determine the size of the lacuna, not the amount of text missing from the Gospel of Matthew. In a subsequent evaluation of the missing leaves (considering the quire numeration and Arabic folio numeration), Skeat and Milne rightly recognized that Cowper had failed to consider that other NT paratextual material likely preceded the Gospel of Matthew; they calculated that the missing Gospel material occupied 16.5 leaves while the *kephalaia* list (1 leaf), Eusebian tables, and perhaps the Epistle to Carpianus filled out the remaining 7.5 leaves.<sup>63</sup> To verify their estimate regarding the missing portion of Matthew, I used a Byzantine text of the Gospel of Matthew to produce the following calculation:

$$77469 \text{ letters} \times \frac{1 \text{ row}}{22.89 \text{ letters}} \times \frac{1 \text{ column}}{50 \text{ rows}} \times \frac{1 \text{ leaf}}{4 \text{ columns}} = 16.92 \text{ leaves}$$

So the lacuna size estimated by Skeat and Milne is reasonable. The *kephalaia* list would not have occupied more than half a leaf (there are 68 chapters in the Gospel of Matthew, which would easily fit on a single folio). If the Gospels of Alexandrinus were preceded in the manuscript by the Eusebian canons in what may have been their earliest and fullest format, then the canons and accompanying *tholos* would have filled 8 leaves<sup>64</sup> or 4 leaves if both sides of the leaves were used. If the shorter format were used, then room would have been available for the Epistle to Carpianus as well.

---

<sup>62</sup> B. H. Cowper, *Codex Alexandrinus. H KAINH ΔΙΑΘΗΚΗ. Novum Testamentum graece ex antiquissimo codice alexandrino a C. G. Woide olim descriptum: ad fidem ipsius codicis* (London: David Nutt and Williams & Norgate, 1860), vi. In total, Cowper believed that only 21–22 leaves were missing from the NT.

<sup>63</sup> H. J. M. Milne and T. C. Skeat, *Scribes and Correctors of the Codex Sinaiticus* (London: British Museum, 1938), 9.

<sup>64</sup> Carl Nordenfalk, “Canon Tables on Papyrus,” *DOP* 36 (1982): 30.

In the book of John, two leaves are missing after V4.F46 (70 Young) from John 6:50–8:52; by Cowper’s calculations, these leaves did not contain the pericope of the adulterous woman.<sup>65</sup> The Arabic folio numeration was performed prior to the loss of these leaves, with the numeration of F46 being calculated to 712 and that of F47 being calculated to 715. The text on F46 ends with *καταβαινων* (6:50); the text on F47 begins with *[συ λεγ]εις εαν τις* (8:52). Based on a Byzantine text of the Gospel, the writing area required for the text of the lacuna (with the *pericope adulterae*) is calculated thus:

$$10325 \text{ letters} \times \frac{1 \text{ row}}{21.91 \text{ letters}} \times \frac{1 \text{ column}}{50-53 \text{ rows}} \times \frac{1 \text{ leaf}}{4 \text{ columns}} = 2.22-2.36 \text{ leaves}$$

The size of the *pericope* is:

$$962 \text{ letters} \times \frac{1 \text{ row}}{21.91 \text{ letters}} \times \frac{1 \text{ column}}{50-53 \text{ rows}} \times \frac{1 \text{ leaf}}{4 \text{ columns}} = 0.207-0.220 \text{ leaves}$$

Since the missing passage of text is 0.22–0.36 leaves too long to fit on the missing two leaves, and because the *pericope* is 0.207–0.220 leaves in length, with Cowper I conclude that the *pericope adulterae* was unlikely to be present in the missing portion of the text.

Three leaves are missing from 2 Corinthians after V4.F100 (Young page 126), which is confirmed by the Arabic page numeration (F100 is numbered 788 and F101 is numbered 792). The missing text is from 2 Corinthians 4:13–12:6; F100 ends with *κατα το γεγραμμενον* (4:13) and F101 begins with 2 Corinthians 12:7.<sup>66</sup>

An unexplained lacuna of a single leaf occurs between the end of Revelation (V4.F133, Arabic page 824) and the salutation of 1 Clement (V4.134, Arabic page 826)—the only evidence of a missing page being the Arabic numbering. The

---

<sup>65</sup> Cowper, vi; *RF<sup>NT</sup>*, 8.

<sup>66</sup> Though the upper left corner of the leaf is damaged, the space allows for the beginning of the verse.

missing leaf goes without mention in the facsimile editions, but is clearly not a missing part of the book before it or the letter that follows it. Because the table of contents makes no mention of any interceding text, perhaps the page served as some type of introduction to the letters of Clement.

A single leaf is missing after V4.F142 (167 Young) from 1 Clement, containing 1 Clement 57:7–63:4. F142, which is damaged at the inner margin, ends with *ασεβειας πλησθησ[ονται]* in the midst of verse 7. F143, also damaged along the inner margin, begins with 1 Clement 64 at *[λοι]πον ο παντεποπτης*. The Arabic numbering confirms the loss of a leaf here, as F142 is numbered 834 and F143 is numbered 836.

As mentioned earlier, Kenyon believed that a single leaf was missing from 2 Clement; Thompson posited instead that 2 leaves are missing from the epistle,<sup>67</sup> which ends at V4.F144 (2 Clem. 12:5) with the phrase *ουτε θηλυ του[το]*. Following this lacuna, the entirety of the Psalms of Solomon is missing. A calculation to approximate space required for the missing text indicates that it is more likely 3 leaves would have been necessary:

$$14946 \text{ letters} \times \frac{1 \text{ row}}{22 \text{ letters}} \times \frac{1 \text{ column}}{51 \text{ rows}} \times \frac{1 \text{ leaf}}{4 \text{ columns}} = 3.33 \text{ leaves}$$

The number of letters/row is somewhat high, since the delimitation practice in the epistle is to start a new row at the end of a discourse unit, rather than concatenating a new unit after a small space.

---

<sup>67</sup> *Facsimile*, 4:4.

## Table of Contents

A table of contents page, written in an uncial hand that appears to be roughly contemporary with but later than those of the original scribes, sits at the front of the codex (V1.F4). Thompson believed the hand was of a “somewhat later date” based on palaeographical evidence (discussed in the next chapter); this is most likely true.<sup>68</sup> The table is presented in two columns and has no heading or title; rather, it simply begins listing the titles of the books of the OT (see Figure 3.10 for the layout of the page). However, the list is not merely an enumeration of books, as the titles are grouped together using header/footer information:

- after the books of the Octateuch, the number of books is listed as eight (ομου βιβλια η);
- after the books of chronicles, the number of books is listed as six (ομου βιβλια ς);
- the books of the prophets are prefixed with a title and count (προφηται ις); subsequently, each of the prophetic books is numbered from one to sixteen;
- the books of the NT are prefixed with a title (“The New Testament”; η καινη διαθηκη);
- immediately following the title of the NT, the Gospels (individually titled as “according to...”) are also given an overarching title (ευαγγελια δ);
- the General Epistles are listed as a single unit, with a count of seven (καθολικαι ζ);

---

<sup>68</sup> See Chapter 4 for an analysis of the hand.

- the letters of Paul are listed as a single unit, with a count of fourteen (επιστολαι παυλου ιδ);
- after the NT books are listed (including the two epistles of Clement), another book count occurs after roughly two blank lines, but the number of the count is missing due to a hole in the vellum (ομου βιβλια [.....]);
- the Psalms of Solomon are listed separately, after the final book count.

Notably missing from the list are the following books/letters: Baruch (**ΒΑΡΟΥΧ**), Lamentations (**ΘΡΗΝΟΙ [ΙΕΡΕΜΙΟΥ]**), the Epistle of Jeremy (**ΕΠΙΣΤΟΛΗ ΙΕΡΕΜΙΟΥ**), Athanasius' Epistle to Marcellinus (**ΑΘΑΝΑΣΙΟΥ ΑΡΧΙΕΠΙΣΚΟΠΟΥ ΑΛΕΞΑΝΔΡΙΑΣ ΕΠΙΣΤΟΛΗ ΠΡΟΣ ΜΑΡΚΕΛΛΙΝΟΝ**), and the additional features such as the canons. The lack of first three (Baruch, Lamentations, and Epistle of Jeremy) may be explained by the decorative titular tailpiece found at the end of the Epistle (V2.F94b); the text of the tailpiece reads, on four separate lines: (1) **ΙΕΡΕΜΙΑΣ ΠΡΟΦΗΤΗΣ** ; (2) **ΒΑΡΟΥΧ** ; (3) **ΘΡΗΝΟΙ** ; and (4) **ΚΑΙ ΕΠΙΣΤΟΛΗ**. So the absence of these items in the table of contents is likely because these books were viewed as a single unit/collection.

The Psalms of Solomon, which are included in the table of contents in the first volume of the codex, are separated from the other books of the NT volume by the phrase *ομου βιβλια* followed by what was no doubt a number, but which has unfortunately been lost because of a hole in the leaf. Commenting on this arrangement, Cowper noted that “the use of these apocryphal Psalms was forbidden



by the synod of Laodicea about the middle of the fourth century.”<sup>69</sup> Scrivener, too, commented on this arrangement:

next is given the number of books, ΟΜΟΥ ΒΙΒΛΙΑ, the numerals being now illegible; and after this, as if distinct from Scripture, the 18 Psalms of Solomon. Such uncanonical works (ιδιωτικοὶ ψαλμοὶ... ἀκονόνιστα βιβλία) were forbidden to be read in churches by the 59th canon of the Council of Laodicea (A.D. 364?); whose 60th canon, which seems to have been added a little later, enumerates the books of the N. T. in the precise order seen in Cod. A, only that the Apocalypse and Clement’s Epistles do not stand on the list.<sup>70</sup>

Indeed, the whole of the 59th canon (the Greek of which may be “somewhat paraphrased”) was that “psalms of private origin are not to be read in the church, nor uncanonical books, but only the canonical books of the Old and New Testaments.”<sup>71</sup>

Cowper made the same reference as Scrivener, adding that the 60th canon is rejected by most critics and that Isidore understood the reference to private psalms to be *ab idiotis compositos*—composed privately, rather than merely used privately.<sup>72</sup>

Whatever the case, the Psalms of Solomon were set apart by the creator of the index as separate from the other collections of books in the manuscript.

Modern contents pages, written by Richard Bentley, accompany each volume of the codex. On V1.F1b, Bentley listed the contents of the first volume making use of Patrick Young’s page numeration. Thus:

---

<sup>69</sup> Cowper, xiv.

<sup>70</sup> Frederick Henry Scrivener, *A Plain Introduction to the Criticism of the New Testament for the Use of Biblical Students*, 3d ed. (Cambridge: Deighton, Bell, and Co, 1883), 95.

<sup>71</sup> William A. Jurgens, *The Faith of the Early Fathers*, vol. 1 (Collegeville, MN: Liturgical Press, 1998), 318.

<sup>72</sup> Cowper, xv.

10.v.p.5.

Vol. I.

Pentateuchus in mosis.

Joshua. 125.

Judicis. 141. b.

Ruth. 128. b.

Regum. lib. 1.<sup>o</sup> 161.

- 2.<sup>o</sup> 182.

- 3.<sup>us</sup> 199.

- 4.<sup>o</sup> 222.

Paralipom. lib. 1.<sup>o</sup> 241.

- 2.<sup>us</sup> 256. b.

Figure 3.9: A modern contents list

Similar modern contents lists occur on V2.F1b, V3.F1b, and V4.F1b. Each such list for the first three volumes has the catalog number of the manuscript written above it (recall that the shelf mark is MS Royal 1. D. V–VIII) in a hand that differs from Bentley's.

Figure 3.10: The index page contents for Codex Alexandrinus

[ΓΕ]ΝΕCICΚOCMOY·	ΨΑΛΤΗΡΙONMEΤΩΔΩN
Ε[ΞΟ]ΔOCΑΙΓΥΠΤΟΥ·	ΙΩΒ
ΛΕΥΙΤΙΚON·	ΠΑΡΟΙΜΙΑΙ·
[Λ]ΡΙΘΜΟΙ·	ΕΚΚΛΗCΙΑCΤΗC·
ΔΕΥΤΕΡΟΝΟΜ[Ι]ON·	ΛCΜΑΤΑΛCΜΑΤΩN·
ΙΗCΟΥCΝΑΥΗ·	CΟΦΙΑΗΠΑΝΑΡΕΤΟC
ΚΡΙΤΑΙ·	CΟΦΙΑΙΗCΟΥΓΓΙΟΥCΙΡΑΧ
ΡΟΥΘ· ΟΜΟΥΒΙΒΛΙΑ Η	ΗΚΑΙΝΗΔΙΑΘΗΚΗ
ΒΑCΙΑΙΩN Α	ΕΥΑΓΓΕΛΙΑ Δ
ΒΑCΙΑΙΩN Β	ΚΑΤΑΜΑΤΘΑ[ΙΟΝ]
ΒΑCΙΑΙΩN Γ	ΚΑΤΑΜΑΡΚ[ΟΝ]
ΒΑCΙΑΙΩN Δ	ΚΑΤΑΛΟΥΚΑΝ
ΠΑΡΑΛΙΠΟΜΕΝΩN Α	ΚΑΤΑΙΩΑΝΝΗΝ
ΠΑΡΑΛΙΠΟΜΕΝΩN Β	ΠΡΑΞΕΙCΑΠΟCΤΑΛΩN
ΟΜΟΥΒΙΒΛΙΑ ζ	ΚΑΘΟΛΙΚΑΙ Ζ
ΠΡΟΦΗΤΑΙ Ις	ΕΠΙCΤΟΛΑΙΠΑΥΛΟΥ ΙΔ
ΩCΗΕ Α	ΑΠΟΚΑΛΥΨΙC[ΙΩΑ]ΝΝΟΥ
ΑΜΩC Β	ΚΛΗΜΕΝΤΟCΕΠΙCΤ[Ο]ΛΗ Α
ΜΙΧΑΙΑC Γ	ΚΛΗΜΕΝΤΟCΕΠΙCΤΟ[Λ]Η Β
[Ι]ΩΗ[Λ] Δ	
[Α]Β[ΔΕΙ]ΟΥ Ε	ΟΜΟΥ ΒΙΒΛΙΑ [.....]
ΙΩ[ΝΑ]C ζ	ΨΑΛΜΟΙCΟΛΟΜΩΝΤΟC
[ΝΑΟΥ]Μ Ζ	ΙΗ
ΑΜΒΑΚΟΥΜ Η	
CΟΦΟΝΙΑC Θ	
ΑΓΓΑΙΟC Ι	
ΖΑΧΑΡΙΟC ΙΑ	
ΜΑΛΑΧΙΑC ΙΒ	
ΗCΑΙΑC ΙΓ	
[Ι]ΕΡΕΜΙΑC ΙΔ	
[Ι]ΕΖΕΚΙΗΛ ΙΕ	
[Δ]ΑΝΙΗΛ Ις	
[Ε]CΘΗΡ	
ΤΩ[Β]ΙΤ	
[ΙΟ]Υ[Δ]ΕΙΘ	
ΕCΖ[Ρ]ΑC Α ΙΕΡΕΥC	
ΕCΖ[ΡΑ]C Β ΙΕΡΕΥC	
ΜΑΚΚΑΒ[Α]ΙΩΝΛΟΓΟC Α	
ΜΑΚΚΑΒΑΙΩΝΛΟΓΟC Β	
ΜΑΚΚΑΒΑΙΩΝΛΟΓΟC Γ	
ΜΑΚΚΑΒΑΙΩΝΛΟΓΟC Δ	

For manuscripts in codex form, titles of books most commonly appeared at the ends of books up through the 15th century.<sup>73</sup> In Alexandrinus the titles of books appear at the end of each book, but often also appear at the beginning (see the Table 3.4 below). In the NT there is some variation between the book titles found in the table of contents (V1.F4a) and those found at the beginning or end of the NT books themselves; there is even variation between the beginning and end of a given book:

**Table 3.4: Titles used at the beginning (B) and end (E) of each book**

Book	Manuscript Title
Matthew	B: (missing) E: ΕΥΑΓΓΕΛΙΟΝ ΚΑΤΑ ΜΑΤΘΑΙΟΝ
Mark	B: [ΕΥΑΓΓΕΛ]ΙΟΝ ΚΑΤΑ ΜΑΡΚΟΝ E: ΕΥΑΓΓΕΛΙΟΝ ΚΑΤΑ ΜΑΡΚΟΝ
Luke	B: ΕΥΑΓΓΕΛΙΟΝ ΚΑΤΑ ΛΟΥΚΑΝ E: ΕΥΑΓΓΕΛΙΟΝ ΚΑΤΑ ΛΟΥΚΑΝ
John	B: n/a E: ΕΥΑΓΓΕΛΙΟΝ ΚΑΤΑ ΙΩΑΝΝΗΝ
Acts	B: n/a E: ΠΡΑΞΕΙΣ ΤΩΝ ΑΓΙΩΝ ΑΠΟΣΤΟΛΩΝ
James	B: n/a E: ΙΑΚΩΒΟΥ ΕΠΙΣΤΟΛΗ
1 Peter	B: (sheared) <sup>74</sup> E: ΠΕΤΡΟΥ Α
2 Peter	B: ΠΕΤΡΟΥ Β <sup>75</sup> E: ΠΕΤΡΟΥ Β
1 John	B: ΙΩΑΝΝΟΥ Α E: ΙΩΑΝΝΟΥ Α
2 John	B: ΙΩΑΝΝΟΥ [...] <sup>76</sup> E: ΙΩΑΝΝΟΥ Β
3 John	B: [...] E: ΙΩΑΝΝΟΥ Γ
Jude	B: [ΙΟΥ]ΔΑ ΕΠΙΣΤΟΛΗ E: ΙΟΥΔΑ ΕΠΙΣΤΟΛΗ
Romans	B: [ΠΡΟΣ ΡΩ]ΜΑΙΟΥΣ E: ΠΡΟΣ ΡΩΜΑΙΟΥΣ

<sup>73</sup> Edith Diehl, *Bookbinding: Its Background and Technique* (New York: Dover, 1980), 1:15.

<sup>74</sup> Ornamentation that typically accompanies the book titles is at the top edge of the leaf.

<sup>75</sup> This title is invisible in the *Facsimile*, but has been revealed in the color, digital images. The letters appear to have been faded due to water damage (perhaps during the Ashburnham House fire).

<sup>76</sup> The remnants of a title written in red ink are plainly visible in the color, digital images. Some kind of ornamentation to the left and right of the title (appearing something like stands for objects that flair out at the top) are also apparent.

Book	Manuscript Title
1 Corinthians	B: (sheared) <sup>77</sup> E: ΠΡΟΣ ΚΟΡΙΝΘΙΟΥΣ Α
2 Corinthians	B: ΠΡΟΣ ΚΟΡΙΝΘΙΟΥΣ Β E: ΠΡΟΣ ΚΟΡΙΝΘΙΟΥΣ Β
Galatians	B: ΠΡΟΣ ΓΑΛΑΤΑΣ E: ΠΡΟΣ ΓΑΛΑΤΑΣ
Ephesians	B: ΠΡΟΣ ΕΦΕΣΙΟΥΣ E: ΠΡΟΣ ΕΦΕΣΙΟΥΣ
Philippians	B: [ΠΡΟΣ] ΦΙΛΙΠΠΗΝΣΙΟΥΣ E: ΠΡΟΣ ΦΙΛΙΠΠΗΝΣΙΟΥΣ
Colossians	B: ΠΡΟΣ ΚΟΛΛΑΣΣΑΙΕΙΣ E: ΠΡΟΣ ΚΟΛΛΑΣΣΑΙΕΙΣ ΑΠΟ ΡΩΜΗ
1 Thessalonians	B: ΠΡΟΣ ΘΕΣΣΑΛΟΝΙΚΕΙΣ Α E: ΠΡΟΣ ΘΕΣΣΑΛΟΝΙΚΕΙΣ Α ΕΓΡΑΦΗ ΑΠΟ ΛΑΘΗΝΩΝ
2 Thessalonians	B: ΠΡΟΣ ΘΕΣΣΑΛΟΝΙΚΕΙΣ Β E: ΠΡΟΣ ΘΕΣΣΑΛΟΝΙΚΕΙΣ Β ΕΓΡΑΦΗ ΑΠΟ ΛΑΘΗΝΩΝ
Hebrews	B: ΠΡΟΣ ΕΒΡΑΙΟΥΣ E: ΠΡΟΣ ΕΒΡΑΙΟΥΣ ΕΓΡΑΦΗ ΑΠΟ ΡΩΜΗΣ
1 Timothy	B: ΠΡΟΣ ΤΙΜΟΘΕΟΝ Α E: ΠΡΟΣ ΤΙΜΟΘΕΟΝ Α ΕΓΡΑΦΗ ΑΠΟ ΛΑΟΔΙΚΕΙΑΣ
2 Timothy	B: ΠΡΟΣ ΤΙΜΟΘΕΟΝ Β E: ΠΡΟΣ ΤΙΜΟΘΕΟΝ Β ΕΓΡΑΦΗ ΑΠΟ ΛΑΟΔΙΚΕΙΑΣ
Titus	B: [ΠΡΟΣ] ΤΙΤΟΝ E: ΠΡΟΣ ΤΙΤΟΝ ΕΓΡΑΦΗ ΑΠΟ ΝΙΚΟΠΟΛΕΩΣ
Philemon	B: [ΠΡΟΣ] ΦΙΛΗΜΟΝΑ E: (missing)
Apocalypse	B: [...] E: ΑΠΟΚΑΛΥΨΙΣ ΙΩΑΝΝΟΥ
1 Clement	B: [...] ΘΥ [...] E: ΚΛΗΜΕΝΤΟΣ ΠΡΟΣ ΚΟΡΙΝΘΙΟΥΣ ΕΠΙΣΤΟΛΗ Α
2 Clement	B: n/a E: (missing)

In the NT volume of the codex the beginning and ending titles, where both are extant, match in the Gospels, Acts and the Catholic Epistles, and the first six of the Pauline Epistles. In contrast, the following eight Pauline Epistles (including Hebrews) all have longer end titles than beginning titles. For the letters with longer end titles, each of them posit a provenance for their respective epistle using a

<sup>77</sup> Again, some title ornamentation survived shearing.

formulaic **ΕΓΡΑΦΗ ΑΠΟ** phrase, except for Colossians, which omits **ΕΓΡΑΦΗ**.<sup>78</sup> In these end titles Colossians and Hebrews were said to be written in Rome, the Thessalonian epistles in Athens, the letters to Timothy from Laodicea, and the letter to Titus from Nicopolis. Revelation appears to have only had an end title, but only because the lead title has been sheared; red ink at the top edge of V4.F125 indicates what are probably the bottom extremities of title letters and some minor sub-title ornamentation. With much of the upper margin trimmed away in the codex it is difficult to detect any pattern of title usage/omission among the scribes.

### Ordering of the New Testament Books

The question that must be answered before analyzing the order of the books found in the current arrangement of the NT in Alexandrinus is this: Does the current order reflect the original or a subsequent composition of the codex? Regarding external indicators, the table of contents page (discussed above) seems to suggest that the current order does reflect the ancient arrangement. Additionally, the Arabic numeration of the leaves (discussed below) provides assurance that in the 14th century the books of the NT were in the same order as they are today. The quire numeration (discussed below) is supportive as well, but less certain since at least one later hand is involved in the quire signatures. With regard to internal indicators, most of the books share a folio or leaf:

- (1) the *kephalaia* of Mark's Gospel immediately follow the ending of Matthew's Gospel on the same folio (V4.F5b);

---

<sup>78</sup> The end title for Colossians appears to have originally intended to omit the formula altogether, as the **ΑΠΟ ΡΩΜΗ** phrase is crowded into the left edge of the title decoration, the entire title is compositionally imbalanced, and the final *sigma* is omitted from **ΡΩΜΗC**. It is likely that **ΕΓΡΑΦΗ** was omitted simply because it would not fit.

- (2) the scribe who copied the Gospels of Matthew and Mark appears to have written the *kephalaia* page to Luke;
- (3) the ending of Acts (column one of V4.F76a) is immediately followed by James in column two;
- (4) the ending of James (column one of V4.F78a) is immediately followed by 1 Peter in column two;
- (5) the ending of 1 Peter (column one of V4.F80a) is immediately followed by 2 Peter in column two;
- (6) the ending of 2 Peter (column one of V4.F81b) is immediately followed by 1 John in the lower half of the column;
- (7) 2 John occurs on the same page (V4.F83b) as the ending of 1 John;
- (8) 3 John occupies column one of page V4.F84a, immediately followed by Jude in column two;
- (9) Romans ends on V4.F92a and 1 Corinthians begins on the other side of the leaf (V4.F92b);
- (10) 1 Corinthians ends in the upper half of column one on page V4.F99b and 2 Corinthians immediately follows it in the lower half of the column;
- (11) 2 Corinthians ends in column one of page V4.F101b and Galatians begins immediately in column two;
- (12) the ending of Galatians (column one of V4.F104a) is immediately followed by the beginning of Ephesians in column two;
- (13) the ending of Philippians (column one of V4.F108b) is immediately followed by the beginning of Colossians in column two;

- (14) Colossians ends on V4.F110a and 1 Thessalonians begins on the other side of the leaf (V4.F110b);
- (15) the ending of 1 Thessalonians (column one of V4.F112a) is immediately followed by 2 Thessalonians in column two;
- (16) the ending of 2 Thessalonians (column one of V4.F113a) is immediately followed by Hebrews in column two;
- (17) the ending of Hebrews (column one of V4.F119a) is immediately followed by 1 Timothy in column two;
- (18) the ending of 1 Timothy (column one of V4.F121a) is immediately followed by 2 Timothy in column two.

Thus the only books of the NT that are not linked together by sharing a page with the beginning or ending of another book are readily apparent in this visualization of the linkages in Figure 3.11:

**Figure 3.11: Points of disconnection between the NT books**

Matthew	Mark	Luke	(no link)	John	(no link)	Acts	James	1 Peter	2 Peter	1 John	2 John	(no link)	3 John	Jude	(no link)	Romans	1 Corinthians	2 Corinthians	Galatians	Ephesians	(no link)	Philippians	Colossians	1 Thessalonians	2 Thessalonians	Hebrews	1 Timothy	2 Timothy	(no link)	Titus	(no link)	Philemon	(no link)	Apocalypse of John	(no link)	1 Clement	2 Clement
Gospels				Acts and General Epistles										Pauline Epistles (including Hebrews)																							

Within the manuscript tradition, the books of the NT tend to be gathered into four transmission units: the Gospels; Acts and the General (or Catholic) Epistles; the Pauline Epistles; and the Apocalypse.<sup>79</sup> In Alexandrinus the transmission units remain intact and in the order of: the Gospels; Acts and the General Epistles

<sup>79</sup> Cf. David Trobisch, *The First Edition of the New Testament* (Oxford: Oxford University Press, 2000), 26. Metzger subdivided into five gatherings, separating Acts from the Catholic Epistles (Bruce M. Metzger, *The Canon of the New Testament* [Oxford: Clarendon Press, 1987], 295).



(alternatively, grouped under Praxapostolos); the Pauline Epistles; the Apocalypse; the epistles of Clement; and the (now missing) Psalms of Solomon. In comparison with the fourth century codices Sinaiticus and Vaticanus, the order of the transmission units found in Alexandrinus matches that of Vaticanus rather than Sinaiticus.<sup>80</sup> It is not surprising from the above figure that each of these transmission units has a break between them (after John's Gospel, after Jude, after Philemon, and after the Apocalypse).

In the sub-unit of the Gospels, Alexandrinus follows the pattern of most biblical manuscripts by placing them in the "canonical" order (using Metzger's term) of Matthew, Mark, Luke, and John. This order was likely popularized by Eusebius and Jerome, as mechanical reproduction of the Eusebian Apparatus tables would naturally indicate that this order be followed.<sup>81</sup>

In the sub-unit of Acts and the General Epistles, the most common sequence is adopted in Alexandrinus, which is Acts followed by the epistles arranged in order of decreasing length, with epistles by the same author grouped together. Metzger affirmed that

in antiquity, the seven Catholic Epistles commonly stood in the order of James, Peter, John, and Jude—so codices Vaticanus, Sinaiticus, Alexandrinus; Synod of Laodicea (A.D. 363); Cyril of Jerusalem; Epiphanius; Athanasius; Gregory Nazianzus; Nicephorus.<sup>82</sup>

---

<sup>80</sup> Trobisch, 25.

<sup>81</sup> Metzger, *The Canon of the New Testament*, 296. While the exact distribution is uncertain, Metzger asserted that this order "is found in nearly all Greek manuscripts". Skeat, in discussing the so-called "Western Order" of the Gospels, referred to the Western Order as having "been a primitive order, and it was not finally replaced by the canonical order until the time of Jerome" (T. C. Skeat, *The Collected Biblical Writings of T. C. Skeat*, ed. J. K. Elliott [Leiden: Brill, 2004], 76.). Arnold asserted that "the order was first settled by the Council of Carthage, A. D. 397, as it now stands, except that James was placed after Peter and John, immediately before Jude" (A. N. Arnold, "Manuscripts of the New Testament," in *The Baptist Quarterly*, Vol. 1, ed. Lucius E. Smith [Philadelphia: American Baptist Publication Society, 1867], 450).

<sup>82</sup> Metzger, *The Canon of the New Testament*, 298.

That Acts and the Catholic Epistles were conceived of as a separate sub-unit at the time of the codex's production is affirmed by the tailpiece art found on V4.F84b.

The tailpiece contains the end title for Jude followed by **ΠΡΑΞΕΙΣ ΤΩΝ  
ΑΓΙΩΝ ΑΠΟΣΤΟΛΩΝ ΚΑΙ ΚΑΘΟΛΙΚΑΙ.**

In the sub-unit of the Pauline Epistles, Alexandrinus adopts an unusual order because of its placement of Hebrews. Considering the table of *stichoi* (or number of lines) in each of the Pauline letters as provided by Metzger,<sup>83</sup> the order of the epistles in Alexandrinus is according to size (from largest to smallest) with Hebrews separating the letters to the churches (Romans through 2 Thessalonians) from the letters to individuals (Timothy, Titus, and Philemon). This order varies from the majority of the late Byzantine manuscripts, which place Hebrews at the end of the Pauline collection.<sup>84</sup> Regrettably, the tailpiece art (and any accompanying sub-unit description) has been cut away from V4.F124a, leaving only the decorative border; it is clear from the size of the decorative border that the end title was not for Philemon alone.<sup>85</sup>

The Apocalypse of John (Revelation) appears to be separate both from the Pauline unit that precedes it (based on the missing tailpiece art) and from the Clementine epistles that follow it (based on the missing separator page described in the Lacunae section above). As a one-element sub-unit of the NT, the tailpiece art at the end of the Apocalypse is not appreciably helpful in distinguishing it as such.

---

<sup>83</sup> Metzger, *The Canon of the New Testament*, 298.

<sup>84</sup> Trobisch, 25.

<sup>85</sup> See Chapter 4 for discussion of the tailpieces.

## Numbering

More than one page numbering system is at work in Codex Alexandrinus, though only two of them pre-date the modern era. In an ancient hand there is (now incomplete due to damage/trimming) an Arabic numbering that runs throughout the codex on the left-facing side of every leaf in the bottom left corner. Additionally, the (originally 8-leaf) quires were numbered by using Greek characters at the top of the first page of each quire, throughout all of Alexandrinus; there is perhaps a mix of ancient and modern hands involved in this numbering.<sup>86</sup> Two modern numbering systems date to the 17th and 19th centuries, respectively: (1) Patrick Young, the King's Librarian who is responsible for much of the modern notation in the manuscript added one set of page numbers written in ink at the center top of each leaf's right page side; and (2) a second set of page numbers, in pencil and more difficult to read, is in the upper right corner of each leaf's right-page side.

## Greek Numbering of Quires

Quire numbers appear throughout the codex (both OT and NT), written in the upper margin of the first page of each quire, centered above the two columns of text. As with the Eusebian apparatus, the Greek numbering is alphabetic and typical in number values (**Α** = 1, **Β** = 2, **Γ** = 3, etc.); the number six is represented with a *stigma* (**Ϛ** or **Ϟ**) and the number ninety is represented with a form of *koppa* that most resembles the Coptic character *fei* (**Ϡ**) in shape,<sup>87</sup> as well as the unnamed Gothic character also representing the number ninety (**ƿ**), rather than the classical character

---

<sup>86</sup> *RF<sup>NT</sup>*, 8.

<sup>87</sup> Bucking notes the difficulty of naming this character because references are late (Scott Bucking, *Practice Makes Perfect: P. Cotsen-Princeton I and the Training of Scribes in Byzantine Egypt* [Los Angeles: Cotsen Occasional Press, 2011], 53–54).

(Ϝ).<sup>88</sup> Quire numbering begins with **λ** on the first page of Alexandrinus (the beginning of Genesis) and continues up until **ΠΒ** (102) in Colossians; beyond that, save for the reconstruction of quire number **ΠΕ** (105), all remaining quire numbers are lost.

Regarding the relationship between quire numbers and the flesh/hair configuration of the first leave of each quire, Thompson commented on the unusual arrangement found in Alexandrinus: rather than the typical configuration where the flesh side of the vellum served as the first page of the quire, the first page of each quire is instead the hair side of the skin.<sup>89</sup> According to Turner, using the flesh side for the first page of the quire was common in the East, “but in Latin manuscripts and in western Europe the hair side is usually found on the outside.”<sup>90</sup>

In the following table (Table 3.5), elements that are missing are indicated with an “N” while elements that cannot be determined because a section of the manuscript is missing (either sheared or torn) are indicated with a “--”. If an element is present only in part, it is placed in square brackets. The key for the table:

- 1: + with dots
- 2: + with dots above *paragraphus*
- †: indicates a cross
- +: indicates a plus-shaped cross
- a: lower inverted triangle of horizontal lines (possibly with curling flourish at tip)
- b: upper triangle of horizontal lines (possibly with curling flourish at tip)
- c: angled brackets on either side of quire number (e.g., **<Z>**)
- d: angled brackets on either side of quire number, with central dot (e.g., **<·1λ·>**)
- e: a *paragraphus* mark appears below the number and a supralinear mark above it
- \*: unique feature described in footnote

<sup>88</sup> Georges Ifrah, *The Universal History of Numbers*, trans. David Bellos, E. F. Harding, Sophie Wood, and Ian Monk (New York: John Wiley and Sons, 2000), 220. There seems to be confusion as to whether the symbol Ϝ represents a *koppa* or a *stigma*.

<sup>89</sup> Thompson, *Greek and Latin Palaeography*, 57.

<sup>90</sup> E. G. Turner, *Greek Papyri: An Introduction* (Princeton: Princeton University Press, 1968), 12.

Table 3.5: The quire signatures of the codex and their associated features

Quire #	Young	Orn.	UL	UR	Page	Notes
λ	1	N	N	N	V1.F5	
Β	9	ab	†	†	V1.F13	
Γ	17	ab	N	N		
Δ	25	ab	†	†	V1.F29	
Ε	33	ab	†	†	V1.F37	
Ζ	41	abc <sup>91</sup>	* <sup>92</sup>	† <sup>93</sup>	V1.F45	
Ζ	49	abc	†	†	V1.F53	
Η	57	ab	†	†	V1.F61	
Θ	65	ab	† <sup>94</sup>	†	V1.F69	
Ι	73	ab	†	†	V1.F77	
Ιλ	81	abd	† <sup>95</sup>	1	V1.F85	
ΙΒ	89	ab	1	1	V1.F93	
[ΙΓ]	97	a	[1]	N	V1.F101	Paratextual features trimmed off at upper margin
ΙΔ	105	ab	†	†	V1.F109	
ΙΕ	113	ab	†	†	V1.F117	
Ιζ	121	ab	†	†	V1.F125	
ΙΖ	125	e	+	+	V1.F129	Two additional + marks bracket the quire number
ΙΘ	141	ab	†	†	V1.F145	Cross in UL has elongated top
Κ	149	ab	2	2	V1.F153	
Κλ	157	a	2	1	V1.F161	Paratextual features trimmed off at upper margin
ΚΒ	161	[e]	N	N	V1.F165	Paratextual features trimmed off at upper margin
ΚΓ	169	e	N	N	V1.F173	Paratextual features trimmed off at upper margin
ΚΔ	177	[e]	N	N	V1.F181	Paratextual features trimmed off at upper margin
ΚΕ	185	e	N	N	V1.F189	Paratextual features trimmed off at upper margin
Κζ	193	e	--	N	V1.F197	
ΚΖ	199	e	+	N	V1.F203	
ΚΗ	207	e	†	N	V1.F211	Paratext extremely faded
λ	223	e	+	N		
λλ	231	e	+	N	V1.F235	

<sup>91</sup> The angled brackets have horizontal lines extending away from the quire number, much like a diple obelismene or forked paragraphus (Turner, *Greek Manuscripts*, 14–15); thus: —< >—.

<sup>92</sup> A mesh-like design is drawn here.

<sup>93</sup> This cross is ornamented at the ends.

<sup>94</sup> Both symbols (in UR and UL) appear to be crosses with a 7-shaped *paragraphus* under them.

<sup>95</sup> The cross may be dotted, but only the cross is visible.

Quire #	Young	Orn.	UL	UR	Page	Notes
λB	239	e	+	N	V1.F243	
λΓ	241	e	--	N	V1.F245	
λΔ	249	e	--	N	V1.F253	
λΕ	257	e	†	N	V1.F261	
λς	265	e	--	N	V1.F269	
λ3 <sup>96</sup>	273	N	--	N	V1.F277	Number has supralinear mark only
<i>volume boundary</i>						
λH	277	ab	N	N	V2.F2	Paratextual features trimmed off at upper margin
[λΘ]	285	a	N	N	V2.F10	Paratextual features trimmed off at upper margin
--	293	*	N	*		Paratext contains unusual features <sup>97</sup>
Ma	301	a	--	* <sup>98</sup>	V2.F26	Paratextual features trimmed off at upper margin
MB	309	ab	--	†	V2.F34	Cross has <i>paragraphus</i> at base
ΜΓ	317	a	--	N	V2.F42	Paratextual features trimmed off at upper margin
ΜΔ	325	a	--	* <sup>99</sup>	V2.F50	Paratextual features trimmed off at upper margin
ΜΕ	333	ab	--	† <sup>100</sup>	V2.F58	Paratextual features trimmed off at upper margin
M[.]	341	* <sup>101</sup>	--	†	V2.F66	Paratextual features trimmed off at upper margin
--	349	*	N	* <sup>102</sup>	V2.F74	Paratextual features trimmed off at upper margin
MH	357	b* <sup>103</sup>	--	+	V2.F82	
MΘ	365	ab	--	† <sup>104</sup>	V2.F90	Paratextual features trimmed off at upper margin
[N]	373	* <sup>105</sup>	N	N	V2.F98	Paratextual features trimmed off at upper margin

<sup>96</sup> It appears that a quire number may have been sheared off the top of the folio, just above and to the left of the modern page number. A *paragraphus* is visible and, above that, the remnants of some characters. The writing of the quire number with a minuscule *zeta* (3) is clearly a later addition.

<sup>97</sup> The upper margin of the folio seems to have been severely trimmed. What survives of the paratext is roughly cross-shaped, but with a nearly filled oval where the vertical and horizontal lines would meet. In the UR is what appears to be the bottom of a dotted cross above a *paragraphus* mark.

<sup>98</sup> The bottom portion of some element is here, and below that a *paragraphus* mark.

<sup>99</sup> A dark mark at the upper edge of the folio suggests that *some* feature was present in UR.

<sup>100</sup> The cross appears to have dots and a flourish off the bottom.

<sup>101</sup> A strange funnel-shaped object is drawn at the center of the upper margin, similar in size and shape to a lower inverted triangle of horizontal lines.

<sup>102</sup> A solid rectangle is just to the left of Young's leaf number, at the top edge of the page and what is possibly an ornament that typically sits beneath a cross trails off the upper right corner of the page; this is probably the beginning of a new quire.

<sup>103</sup> Below the quire number appears a vertical vine design.

<sup>104</sup> With dots!

Quire #	Young	Orn.	UL	UR	Page	Notes
<b>Na</b>	381	a	N	2	V2.F106	Paratextual features trimmed off at upper margin
<b>NB</b>	388	ab	--	† <sup>106</sup>	V2.F113	
<b>NΓ</b>	396	a	--	2	V2.F121	Paratextual features trimmed off at upper margin
<b>NΔ</b>	404	ab	--	2	V2.F129	Paratextual features trimmed off at upper margin
<b>NE</b>	412	ab	--	†	V2.F137	
<b>NS</b>	418	N	--	N	V2.F143	Paratextual features trimmed off at upper margin
<b>NZ</b>	426	N	--	N	V2.F151	Quire number only has supralinear mark
<b>NH</b>	434	N	N	N	V2.F159	Quire number only has supralinear mark; Young's numbering appears over quire number
<b>NΘ</b>	438	N	--	N	V2.F163	Quire number only has supralinear mark
<b>Ξ</b>	446	N	--	N	V2.F171	Quire number only has supralinear mark; Young's numbering appears over quire number
<b>Ξα</b>	454	N	--	N	V2.F179	Quire number only has supralinear mark
<b>ΞB</b>	470	N	--	1 <sup>107</sup>	V2.F186	Quire number only has supralinear mark; Young's numbering appears over quire number
<b>ΞΓ</b>	478	ab	--	1 <sup>108</sup>	V2.F194	Quire number only has supralinear mark; Young's numbering appears over quire number
<b>ΞΔ</b>	486	a	--	‡ <sup>109</sup>	V2.F202	Paratextual features trimmed off at upper margin
<b>ΞE</b>	494	a	+	+	V2.F210	Paratextual features trimmed off at upper margin; a second pair of +s frame the quire number, one on either side

<sup>105</sup> A very minor flourish appears below the (mostly sheared) quire number.

<sup>106</sup> With dots!

<sup>107</sup> Three of these markings appear in the top margin: two near but above the quire number and one in UR.

<sup>108</sup> The same three markings appear as in the previous quire, but above this quire number appears the inverted triangle of horizontal lines. If a quire number appeared above the triangle figure, it would have been framed by the two cross figures.

<sup>109</sup> The bottom of a cross or some other feature may be visible at the top edge of the folio.

Quire #	Young	Orn.	UL	UR	Page	Notes
Ξ[ς]	502	a	1	1	V2.F218	Paratextual features trimmed off at upper margin; a second pair of +s frame the quire number, one on either side; S-shaped flourish beneath UR +
ΞΖ	509	ab	†	†	V2.F225	Paratextual features trimmed off at upper margin
ΞΗ	517	ab	†	†	V2.F233	
<i>volume boundary</i>						
ΞΘ	523	N <sup>110</sup>	N	N		Quire number only has supralinear mark
Ο	531	N	N	N	V3.F10	Quire number only has supralinear mark
Οα	539	N	N	N	V3.F18	Quire number only has supralinear mark
ΟΔ	554	N	N	N	V3.F33	Above the supralinear mark of the quire number appears a modified cross with a C-shaped hook at the top
ΟΕ	562	N	N	N	V3.F41	Quire number only has supralinear mark
ΟΣ	570	ab	1	1	V3.F49	A second pair of dotted +s frame the quire number
ΟΖ	578	a	+ <sup>111</sup>	+	V3.F57	A second pair of +s frame the quire number
ΟΗ <sup>112</sup>	586	N	N	+	V3.F65	Paratextual features trimmed off at upper margin; a pair of crosses also frame the quire number
ΟΘ	594	N	1	1	V3.F73	Quire number only has supralinear mark; a second pair of dotted +s frame the quire number, one on either side
Π	602	a	1	1	V3.F81	Paratextual features trimmed off at upper margin; a second pair of dotted +s frame the quire number, one on either side
Πα	610	a	1	1	V3.F89	Paratextual features trimmed off at upper margin; a second pair of dotted +s frame the quire number, one on either side

<sup>110</sup> What looks like possible ornamentation around the quire number is ink that has transferred from the facing page (thus, a mirror image of the shelf mark written on the facing page).

<sup>111</sup> A *paragraphus* appears near the cross.

<sup>112</sup> None of the quire number is visible; four dots appear at the center top margin, the outermost two likely representing the bottom of two crosses flanking the quire number. In the UR the bottom of another cross (if there is any pattern to quire pages) is visible.



Quire #	Young	Orn.	UL	UR	Page	Notes
ΠΒ	618	ab	†	†	V3.F97	Paratextual features trimmed off at upper margin; UL cross has <i>paragraphus</i> below it
ΠΓ	626	a	1	1	V3.F105	
ΠΔ	634	a	--	1	V3.F113	
Πθ	33	N	N	N	V4.F9	Chapter names appear in upper margin
ϣ	41	N <sup>113</sup>	--	1	V4.F17	Chapter names appear in upper margin
ϣα	52	N	--	N	V4.F28	Chapter names appear in upper margin
ϣΒ	60	?	--	N	V4.F36	Chapter names appear in upper margin
ϣΓ	68	N	--	N	V4.F44	[Chapter names appear in upper margin]
ϣΕ	84	N	--	N	V4.F58	
ϣϚ	92	* <sup>114</sup>	--	N	V4.F66	Quire number split by a dangling ornament
ϣΖ	98	N	--	N	V4.F72	
ϣΗ	106	N	--	N	V4.F80	
ϣθ	114	N	--	N	V4.f88	Bottom of quire numbers visible
ρα	127	N	--	†	V4.F101	
ρΒ	135	ab	--	[†]	V4.F109	UR element is only visible as
[ρΓ]	142	* <sup>115</sup>	--	[†]	V4.F117	UR element is only visible as
[ρΔ]	150	* <sup>116</sup>	--	N	V4.F125	
ρΕ	158	--	--	--	V4.F133	Heavy damage to the upper and outer margins; quire number written by later hand over col. 2

Gathering the quire numeration data into tabular form and looking for general patterns of behavior, there appear to be roughly three hands responsible for the quire numbering. Letter formation is much more irregular in this numeration than is found in lists (e.g. in Psalms of the OT or in the *kephalaia* tables of the NT), but some broad differences are apparent. Unfortunately, no palaeographical studies of number

<sup>113</sup> Some form of a plant is drawn to the left of the quire number.

<sup>114</sup> Only the dangling lower element of an ornament is visible here, dividing the two characters of the later quire numeration.

<sup>115</sup> The lower element of ornamentation is visible, a line curving left and right below an outlined diamond (?) shape.

<sup>116</sup> Only the dangling lower element of an ornament is visible here, in red ink.

formation or scribal habits regarding numbers have been published to date. Because numbers used in the quire signatures do not follow the ruling of the manuscript (unlike the numbers in the *kephalaia* lists), less uniformity in their size and shape might be expected. Some of the numbers used for the quire signatures appear in the book hand uncial characters of the biblical books while others make use of minuscule characters. In the descriptions of the hands that follow, consideration is made of the ornamentation accompanying the quire signatures, the character shapes themselves, and the possibility that some of the quire numbers had been re-written by a later hand, but in the correct position (i.e., on the first leaf of a quire).

The first hand wrote quire numbers **Α** through **ΚΑ** (Genesis through Ruth): the script is that of “biblical majuscule” (with thick vertical strokes and thinner horizontal strokes) that matches the general appearance of the biblical text; the ornamentation for the quire numbers fairly consistently uses the triangles of horizontal lines; and the upper left and right margins of the page (UL and UR) employ some type of cross on the first quire page. The *theta* in this hand is circular and may be distinguished from the narrow, vertically oblong *theta* of hands two and three. The difference in the shape of *alpha* between the quire signatures **Α** and **ΚΑ** may be attributed to the first quire number being touched up by a later hand.<sup>117</sup>

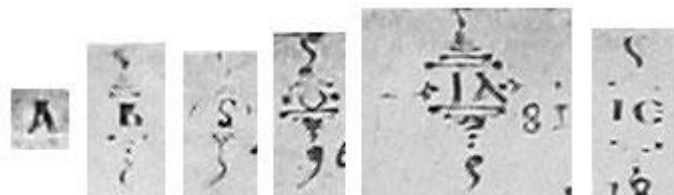
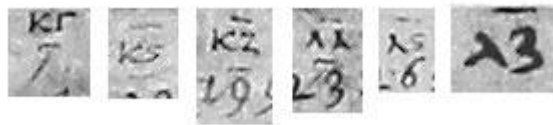


Figure 3.12: Quire signatures from the first hand

<sup>117</sup> Thompson felt that “the first few signatures, **Α-Ε** (of which **Α** has been touched over), are possibly by a hand contemporary with the text; the remainder are certainly not so early, and in the latter volumes are quite modern” (*Facsimile*, 1:8).

The second hand wrote quire numbers **KB** through **Λ3**. The ornamentation of the quire signatures suddenly shifts from the triangular designs of the first hand, emanating up and down from the quire numbers, to the use of *paragraphus* ornaments below the quire numbers for this hand. The quire numbers are generally smaller and written with thinner strokes than those of the first hand. The final quire number of this section (**Λ3**) appears to have been added by a later hand, just as the page it is on (V1.F277a) appears to have been re-inked at a later date; the quire number is off to the right of center, is written in a bolder style, and lacks the *paragraphus* below it. The start of this hand happens to occur at the beginning of 1 Samuel, which is where both Kenyon (1909) and Skeat and Milne (1938) note a shift from OT Scribe 1 to OT Scribe 2. The end of this hand occurs at the terminus of the first volume; both Kenyon and Skeat and Milne note a switch back to OT Scribe 1 at the beginning of the second volume.



**Figure 3.13: Quire signatures from the second hand**

The next series of quire numbers are from **ΛH** to **NΘ**. In this series many of the decorative features of the quire signatures appear to have been trimmed by the binder's plough. The pattern of ornamenting quire numbers with a *paragraphus* and supralinear mark (as seen with the second hand) disappears with the start of this series and the pattern of using triangular arrangements of horizontal lines (also used by the first hand) re-appears. Some of the quire numbers in this series retain the look of the first hand: **MB**, **MΓ** (though partial), **MA**, and **MH**. Others appear to be reconstructions of quire numbers by a later hand, some using the triangular

ornaments and some simply writing the numbers at a lower position with a supralinear mark: **MA**, **MΘ**, **NA**, **NE**, **NS**, **NZ**, and **NH**. This series appears to be a combination of the first hand with reconstructions written by a later hand (quite possibly the third hand, described below). Access to the manuscript or color, digital images would be invaluable to determining more about the hand used in this series of quire numbers.

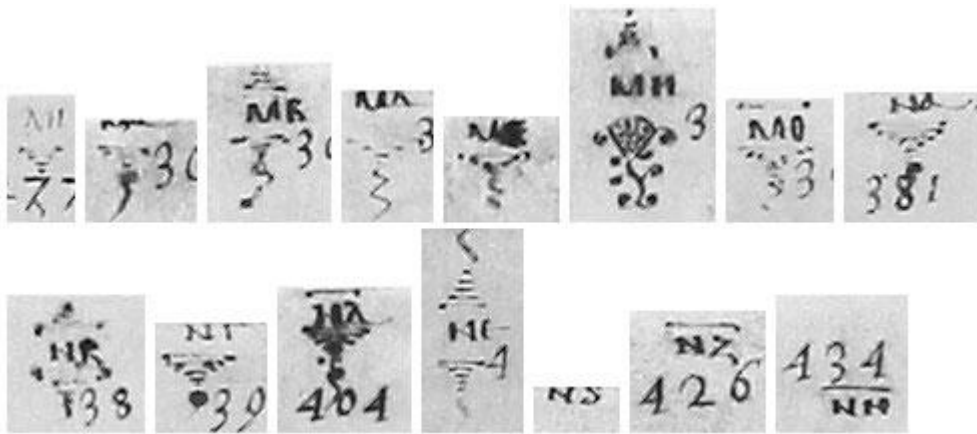
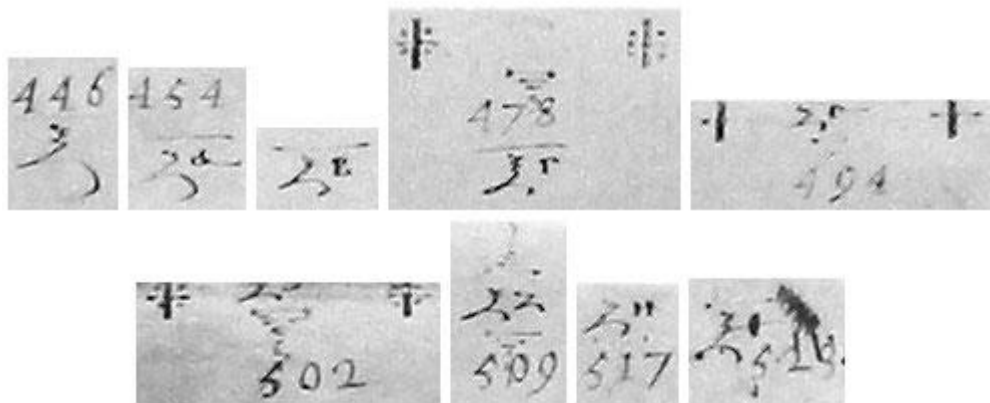


Figure 3:14: Quire signatures with the first hand and a later hand

The third hand wrote quire numbers **Ξ** to **ΠΒ**. These quire numbers show a great deal of variance from the other hands: the script is written with thin strokes and makes no attempt to mimic the style of the biblical uncial characters used in the text; the ornamentation is sparse; and the hand uses a lower case *alpha* character (**Ξα**, **Οα**, **Πα**, **Ϛα**, **ρα**). Unlike the first hand, this hand has a particularly narrow, vertically oblong *theta* and the *epsilon* has a middle stroke that extends far to the right of the character (see Figures 3.15 and 3.16). The *omicron* is remarkably small compared to the other characters. The letter *xi* used in the quire numbers of the 60s is much more flamboyant when compared to the use of the character in the Eusebian Apparatus; the final two strokes of those written in the quire signatures jut far to the left and then

right of the central square of the character while those of the Eusebian Apparatus fit within that square.



**Figure 3.15: Quire signatures from a later hand**

In the case of quires 60, 61, and 63, the quire numbers appear uncharacteristically *below* Young's page numeration; quire 63 is not placed between the ornaments that would normally flank and rest below the numbers. Numbers 65 and 66, both partially missing, are properly flanked by the cross ornaments; of the two, the *xi* in number 65 appears much more conservatively written than the others, possibly indicating a different hand.

Several of the quire numbers in this series are outlined with a faint line that seems to circumnavigate ornamentation when it is present. Could this recurrent line reflect an erasure of the original hand in the quire numeration, perhaps a result of washing away the first ink? Or could they signify water damage of some kind? The image for quire number **ΘΘ** (shown below) was broadly cropped to provide a clear example of this line. Additionally, the supralinear mark for some of these numbers (see Figure 3.16) appears unusually long compared to others in the series.

Additionally, in place of a quire signature for quire 100 is an unusual arrangement of Greek characters (Figure 3.17), written in an ink that appears to match that of the

preceding quire signatures; to my knowledge, the meaning of the characters has not been deciphered.

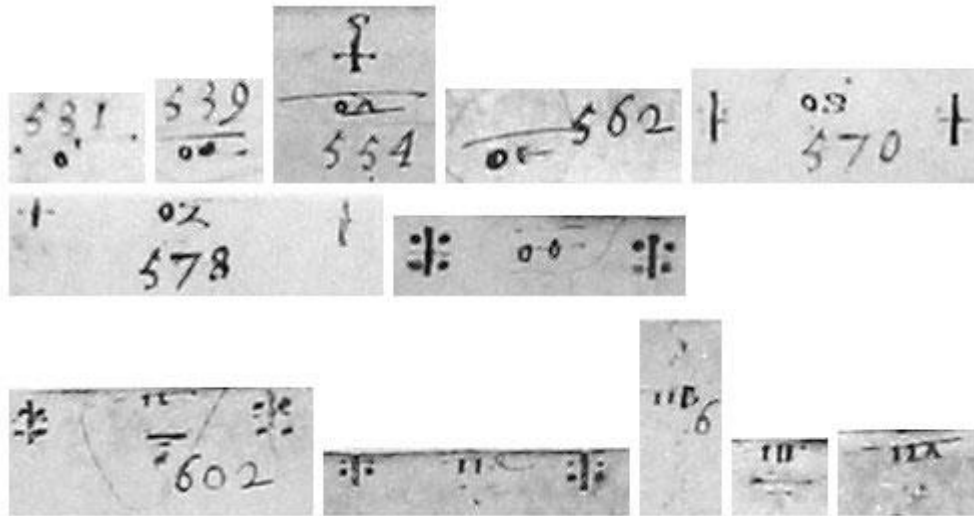


Figure 3.16: Quire signatures with faintly outlined boundaries

The first hand's quire numeration was certainly added prior to Young's central page numbering, as the modern page numbering appears to move to avoid collision with quire numbers (e.g. quires 1, 2 [possible], 11 [possible]) and occasionally his page numbering overlaps the flourishes surrounding the quire numeration (e.g. for quires 15, 16, 20, 21). Young also over-writes the quire signature ornamentation of the second hand (e.g. for quires 26, 27, 31, 32, 33). In the third section of quire signatures, Young clearly avoided quire numbers that were placed in his typical numbering position (e.g., his page 333 is shifted far to the right of quire signature **ME** and his page 341 away from the signature **M**Σ). Regarding the more "modern" quire numeration, Young's numbering (239) overlaps the ornamentation (*paragraphus*) beneath quire number **LB**, and it would be strange for him to overwrite his own reconstructed numeration; though the quire number is missing on Young's page 285, he overwrites the lower ornamentation here as well.

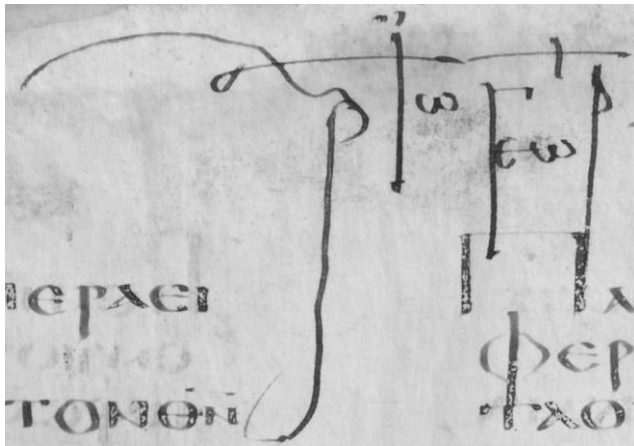


Figure 3.17: Quire 100 writing

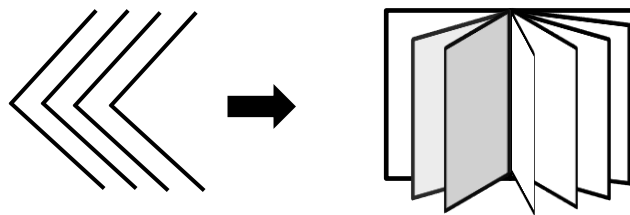
The NT quire numbering is available in color (quires **Πθ** to **ΠΕ**) and each of those quire signatures was written in a crisp, black ink that is certainly more recent than the inks of the original hands.<sup>118</sup> This is apparent when contrasted with the faded ink used for the ornamentation accompanying some of the quire numbers in this series (e.g., the checkered box and UR cross for **Πθ**; the central plant ornament and UR cross for **Ϛ**; the remnants of lower, central ornaments for **Ϛς** and quire 103; and the upper and lower number ornaments and UR cross for **ΠΒ**); that ink, used for the ornamentation, is most certainly a match for the first hands. So it appears that a later hand in this series *did* re-write the quire signatures, doing so where original quire signatures were placed—at least as often as this can be verified with extant ornamentation. The hand that re-inked the quire numbers always attached a slanted cross (or *paragraphus*?) to the upper left “arm” of the **Ϛ**. Again, because the ornaments in this series show signs of being written in red (or red and black), color images of the quire numbers written in the OT would be very helpful in separating the hands responsible for the numeration. Regardless, it can be safely concluded

<sup>118</sup> The quire numeration for **ΠΕ** is an exception; it appears to have been added by a different hand altogether, probably as a result of the extensive damage to the first leaf of quire 105.

that, even if Young were responsible for the re-inked quire numbers (which seems unlikely),<sup>119</sup> it appears that the re-written numbers were properly located on the first page of each of the ancient quires.

### Quire Structure

An important codicological feature to address for Alexandrinus is the collation or quire structure of the manuscript. The typical quire in this manuscript contains 8 leaves, though a number of the quires are smaller and a single quire in the NT is larger. To create an 8-leaf quire, four separate sheets of skin were gathered together and folded in the middle form a gathering of four sheets = eight leaves = sixteen pages:



**Figure 3.18: Four sheets are folded and nested together (illustrated on the left) and this nested collection is sewn together to form a quire (illustrated on the right)**

With regard to determining the quire sizes used in Alexandrinus (which, as discussed above, was disassembled for its rebinding in England), the scholarly assessment underwent a bit of development in the 19th and 20th centuries. When the NT volume of the *Facsimile* was published in 1879, Thompson asserted that the quire numbering in the NT was written by Patrick Young and was, at times, incorrectly placed:

Quire signatures, written in the upper margins, were also added by Patrick Young, but have suffered mutilation. Those that remain, ff. 9 (33), 17 (41), 28 (52), 36 (60),

---

<sup>119</sup> The shearing of the quire numbers does not help prove this, unfortunately, since Young's central page numeration was also sheared.



44 (68), 58 (84), 66 (92), 72 (98), 101 (127), 109 (135), are, in some instances, affixed to the wrong leaves. The quires are actually composed as follows:—(f. 1, modern fly-leaf), ff. 2–7, 8–13, 14–19, 20–25, 26–27, 28–35, 36–43, 44–49 (two leaves wanting), 50–57, 58–65, 66–71, 72–77, 78–83, 84–89, 90–95, 96–101 (three leaves wanting), 102–107, 108–113, 114–119, 120–125, 126–133. The last eleven leaves, 134–144 (159–169), are in single sheets, having lost their quire-formation by the injury to the back.<sup>120</sup>

According to this arrangement, many of the NT quires were 6-leaf gatherings, interspersed with a few 8-leaf gatherings. A year later, however, Thompson retracted this assessment in the introduction to the first volume of the OT, noting that “when the MS. was re-bound in the present century, the quire-formation was disregarded, the leaves being separated and re-backed and made up into sets of six.”<sup>121</sup> In this re-addressing of the quire structure found throughout the manuscript (both OT and NT), Thompson noted that “the quires are composed of eight leaves” with a list of exceptions (assembled for clarity in Table 3.6).<sup>122</sup>

With the production of the *Reduced Facsimile* beginning in 1909 with the NT volume, Kenyon reiterated Thompson’s assertion that each quire contained eight leaves:

The quires, as originally arranged (before a modern re-binding, which re-arranged them in gatherings of 6 leaves) were normally of eight leaves, numbered (in Greek characters) at the top of the first page. This numeration, like the Arabic leaf-numeration, runs continuously through the whole MS., the New Testament (including the three quires and one leaf lost at the beginning) occupying quires 85 to 106.<sup>123</sup>

These two assessments of the quire structure appear to be, in general, aligned with the manuscript evidence. Thompson’s modified view does not specifically address whether or not he yet believed that Young was responsible for the quire signatures in the NT (though he still considered them “quite modern”). A couple of

---

<sup>120</sup> *Facsimile*, 4:5. In this quotation, Thompson places the upper central page numeration written by Young in parenthesis.

<sup>121</sup> *Facsimile*, 1:8.

<sup>122</sup> *Facsimile*, 1:8.

<sup>123</sup> *RF<sup>NT</sup>*, 8.

comments can be made regarding his list of variants from the 8-leaf quire (found in Table 3.6). First, his list is artificially inflated since he added quires with missing leaves (i.e., quires 22, 73, 93, and 100). Second, Thompson did not make clear that quire 106 is without an actual quire signature (there are no visible signs of quire signatures after quire 102), so any estimation of the leaves in such a hypothetical quire is merely a conjectural reconstruction.

**Table 3.6: Thompson's variants from the 8-leaf quire structure**

Quire No.	No. of Leaves	Contents
16	4	ff. 125–129 (121–124)
21	4	ff. 161–164 (157–160)
22	7	"a leaf lost"; ff. 165–171 (161–167)
26	6	ff. 196–201 (193–198)
32	2	ff. 242, 243 (239, 240)
37	4	"last quire"; ff. 276–279 (273–276)
51	7	ff. 106–112 (381–387)
55	6	ff. 137–142 (412–417)
58	4	ff. 159–162 (434–437)
61	7	ff. 179–185 (452–460)
66	7	ff. 218–224 (502–508)
68	6	"last quire"; ff. 233–238 (517–522)
72	n/a	"wanting"
73	7	"first leaf lost"; ff. 26–32 (547–553)
84	6	"last quire"; ff. 113–118 (634–639)
85–87	n/a	"wanting"
88	7	"first leaf lost"; ff. 2–8 (26–32)
90	11	ff. 17–27 (41–51)
93	6	"two leaves lost"; ff. 44–49 (68–70, 73–75)
96	6	ff. 66–71 (92–97)
100	5	"three leaves lost"; ff. 96–100 (122–126)
106	3	"last quire"; ff. 142–144 (167–169)

Certainly some reconstruction is required. For, despite Kenyon's assertion that the quire numeration runs through the entirety of the manuscript, several of the quire numbers appear to have been lost to the binder's plough. The most likely sequence of events with regard to the loss of quire numbers follows:

1. Quire signatures were added to the manuscript (by more than one hand);
2. The manuscript was delivered to England;
3. The manuscript pages were numbered by Patrick Young, who often avoided quire signatures or over-wrote their ornaments to do so;
4. The English bookbinder ploughed the manuscript, trimming both Young's leaf numeration and the quire numeration.

Using the surviving quire data it is possible to reconstruct a more accurate layout (both known and hypothetical) for the structure and arrangement of quires in the codex. By far, the most common quire size is indeed 8 leaves, as is apparent in Table 3.7 (variants are shaded).

Variation from the 8-leaf quire can often be easily explained. In the first volume the 4-leaf quire 16 was shortened to finish off Deuteronomy before beginning Joshua with a new quire; the 4-leaf quire 21 was shortened to finish off Ruth before starting a new quire with 1 Samuel; the 6-leaf quire 26 was shortened at the end of 2 Samuel; the 2-leaf quire 32 finished off 2 Kings before starting a new quire for 1 Chronicles; and the 4-leaf quire 37 finished off 2 Chronicles and ended Volume 1.

In the second volume most of the variations can be explained: the 6-leaf quire 55 finishes Bel and the Dragon before beginning Esther with a new quire; the 4-leaf quire 58 finishes off the book of Judith before starting a new quire for 1 Esdras; the 7-leaf quire 61 ends 2 Esdras before starting a new quire for 1 Maccabees; and the 6-leaf quire 68 finishes off the book of 4 Maccabees (and the end of the volume). More puzzling, however, are the 7-leaf quires 51 and 66. Each of these 7-leaf quires ends in the midst of a book: Ezekiel and 3 Maccabees, respectively.

Table 3.7: Quire sizes

Quire No.	No. of Leaves	Quire No.	No. of Leaves	Quire No.	No. of Leaves
1	8	37	4	71	8
2	8	<i>volume border</i>		72	?
3	8	38	8	73	?
4	8	39	8	74	8
5	8	[40]	(8)	75	8
6	8	41	8	76	8
7	8	42	8	77	8
8	8	43	8	78	8
9	8	44	8	79	8
10	8	45	8	80	8
11	8	46	8	81	8
12	8	[47]	(8)	82	8
13	8	48	8	83	8
14	8	49	8	84	6
15	8	50	8	<i>volume border</i>	
16	4	51	7	[85]	?
17	(8)	52	8	[86]	?
[18]	(8)	53	8	[87]	?
19	8	54	8	[88]	?
20	8	55	6	89	8
21	4	56	8	90	11
22	8	57	8	91	8
23	8	58	4	92	8
24	8	59	8	93	(8)
25	8	60	8	[94]	(8)
26	6	61	7	95	8
27	8	62	8	96	6
28	(8)	63	8	97	8
[29]	(8)	64	8	98	(8)
30	8	65	8	99	8
31	8	66	7	[100]	(8)
32	2	67	8	101	8
33	8	68	6	102	8
34	8	<i>volume border</i>		[103]	8
35	8	69	8	[104]	8
36	8	70	8	105	8

In previous scholarship there has been no mention made of an apparent lacuna between 2 Esdras and 1 Maccabees, most likely because the ending of 2 Esdras and the beginning of 1 Maccabees are intact in the extant pages of the manuscript. As mentioned above, quire 61 is unusual among its peers by having only 7 leaves; however, the Arabic folio numeration reveals that the quire had 8 leaves around the time of Athanasius II. The Arabic page number for V2.F185 (though sheared) can be interpolated to 462; the page number for F186 is 464. There was, at one point, a leaf separating 2 Esdras from 1 Maccabees. I believe the lacuna is legitimate—though we cannot know what was on the missing leaf—and have included it in the OT Table of Concordance in Appendix A.

In the third volume, there are two portions of Table 3.7 that are highlighted with possible variation. In the more certain occurrence, quire 84 is reduced to 6 leaves to match the end of Ecclesiasticus and thus is easily explained. In the second occurrence, because of the lacuna in Psalms, the quire signatures for quires 72 and 73 are missing. However, according to the Arabic page numeration (which was added while the Psalms were still intact), the lacuna consists of 9 missing leaves. If the two quires were both 8 leaves in length (as they are in the rest of the volume, save the final quire) then the last 7 leaves of quire 73 have been preserved and the 8 leaves of quire 72 and the first leaf of quire 73 are missing.

The quire structure of the fourth volume is more indeterminate than the others because so many of the quire signatures are missing. Since the third volume ends with quire 84, quires 85–87 must make up the first NT lacuna; the end of the gospel of Matthew and the first three leaves of Mark would represent the last seven leaves

of quire 88. The Arabic folio numbering ends at 641 in the third volume and begins with 668 in the fourth; using those folios numbers, it is likely that quires 85–87 each contained 8 leaves and a single leaf is missing from quire 88 ( $1 + (3 \times 8) = 25$  missing leaves). Young's modern page numeration, which allows for 25 missing pages, is therefore quite reasonable.

Most unusual is the make-up of quire 90, which has 11 leaves. The first three leaves (containing the ending of Mark and the chapter list for Luke) will be, according to the palaeographic analysis of Chapter 4, attributed to the first of the NT scribes. The remaining 8 leaves (Luke 1:1–9:5) will be attributed to the second NT scribe. It appears then that the second scribe began work on Luke in an 8-leaf quire and the remainder of Mark and the chapter index, finished by the other scribe, was tacked on to form a larger, 11-leaf, quire. Since the original binding is lost and the quires have been disassembled, it is impossible to know with certainty the original configuration of this quire. However, the 3-leaf addition must have been appended to the front of the quire since folding an addition around the 8-leaf unit would have interrupted the text following the 8-leaf unit and no such interruption is apparent in the extant text.

Though the quire number for quire 94 is missing, there are 16 leaves between quire 93 and 95 (14 extant leaves and a 2-leaf lacuna). The manuscript's norm of 8-leaf quires was most likely followed in this section such that both quires 93 and 94 were 8-leaves in length. Likewise, the quire number for quire 100 is missing, there are a total of 16 leaves (13 extant leaves and a 3-leaf lacuna) in quires 99 and 100. Again, given the normal 8-leaf quire size for this manuscript, it is reasonable to

assume that each of the quires (99 and 100) is 8 leaves in size. This would also mean that quire 100 (V4.F96–100 plus a 3 leaf lacuna), which marks a switch between the two scribes at work in the Gospels, makes for a natural delineation point between the two hands. After quire 102 there are no more extant quire numbers in the middle of the upper margin, but there are clues for quire division beyond this point. Lower ornamental elements remain in the middle of the upper margin of V4.F117 and V4.F125, where the quire numbers for quires 103 and 104 would be expected in a continuing 8-leaf quire model. Additionally, quire 105 (which has extensive upper margin damage) is marked by a later hand in the upper right corner as **πε**. No further quire information is available beyond that point.

#### Arabic Numbering of Leaves

As mentioned, Arabic numerals appear in the lower left corner of the leaves, from Genesis through the Clementine epistles. Though the numbers were added by a later hand, they were written prior to the page shearing of one or more of the binders. As Thompson notes, this numbering “ran through the entire Codex, the figures being inscribed on the lower corners of the left-facing sides of the leaves; but, owing to the cutting of the margins, it has been partially lost.”<sup>124</sup> As a result, the number is often missing entirely, or missing the left-hand digits. What has survived the binder’s plough in the NT is recorded below in Table 3.8:

---

<sup>124</sup>*Facsimile*, 1:1.

**Table 3.8: Arabic folio numeration (V4)**

MS Page	Arabic Number	Verses (on left-facing side)
F29	[69]5	Lk 10:13–36
F30	[...]	Lk 11:18–42
F31	[...]	Lk 12:10–38
F32	[...]	Lk 13:4–28
F33	[...]	Lk 14:17–15:7
F34	[...]	Lk 16:1–24
F35	[...]	Lk 17:17–18:8
F36	[70]2	Lk 18:36–19:23
F37	[70]3	Lk 20:6–35
F38	704	Lk 21:21–22:12
F39	[70]5	Lk 22:42–23:3
F40	[70]6	Lk 23:33–24:5
F41	[7]07	Lk 24:32–53
F42	708	Jn 1:19–44
F43	[7]09	Jn 2:19–3:19
F44	[...]	Jn 4:13–41
F45	711	Jn 5:14–40
F46	[...]	Jn 6:22–50
lacuna		
F47	[...]	Jn 9:19–10:7
F48	716	Jn 10:38–11:30
F49	[7]17	Jn 11:57–12:27
F50	[...]	Jn 13:5–36
F51	[7]19	Jn 14:28–15:26
F52	[...]	Jn 16:29–17:24
F53	[...]	Jn 18:25–19:10
F54	[...]	Jn 19:36–20:20
F55	[...]	Jn 21:15–25
F56	[72]4	Acts 1:24–2:23
F57	[...]	Acts 3:3–4:3
F58	[72]6	Acts 4:31–5:21
F59	[...]	Acts 6:3–7:14
F60	[...]	Acts 7:42–8:10
F61	[...]	Acts 8:39–9:27
F62	[...]	Acts 10:11–36
F63	[...]	Acts 11:16–12:10
F64	[...]	Acts 13:7–32
F65	[...]	Acts 14:8–15:4

MS Page	Arabic Number	Verses (on left-facing side)
F66	734	Acts 15:30–16:15
F67	[...]	Acts 16:39–17:20
F68	[73]6	Acts 18:12–19:10
F69	[...]	Acts 19:33–20:16
F70	[...]	Acts 21:5–27
F71	[...]	Acts 22:10–23:6
F72	740	Acts 23:28–24:21
F73	[7]41	Acts 25:16–26:11
F74	[7]42	Acts 27:3–28
F75	743	Acts 28:8–30
F76	744	Jas 1:16–2:14
F77	[7]45	Jas 3:17–5:8
F78	746	1 Pt 1:13–2:16
F79	747	1 Pt 3:16–5:1
F80	[7]48	2 Pt 1:15–2:16
F81	[7]49	2 Pt 3:16–18; 1 Jn 1:1–2:9
F82	750	1 Jn 3:5–4:4
F83	[7]51	1 Jn 5:9–21; 2 Jn 1–13
F84	[7]52	Jude 12–25
F85	[7]53	Rom 1:28–2:26
F86	754	Rom 4:1–5:3
F87	[...]	Rom 6:10–7:13
F88	[...]	Rom 8:20–9:11
F89	757	Rom 10:10–11:20
F90	758	Rom 12:15–14:8
F91	[7]59	Rom 15:11–16:4
F92	[7]80	1 Cor 1:1–30
F93	[7]81	1 Cor 3:13–4:18
F94	[...]	1 Cor 6:18–7:30
F95	783	1 Cor 9:7–10:8
F96	784	1 Cor 11:6–12:3
F97	785	1 Cor 13:4–14:20
F98	[7]86	1 Cor 15:12–44
F99	[7]87	1 Cor 16:15–24; 2 Cor 1:1–16
F100	788	2 Cor 3:5–4:13
lacuna		



MS Page	Arabic Number	Verses (on left-facing side)
F101	[7]92	2 Cor 13:9–13; Gal 1:1–14
F102	[...]	Gal 2:17–3:24
F103	794	Gal 4:30–6:7
F104	[79]5	Eph 1:4–2:16
F105	[...]	Eph 4:4–32
F106	797	Eph 5:33–6:24
F107	798	Phil 1:29–2:30
F108	799	Phil 4:8–23; Col 1:1–13
F109	800	Col 2:8–3:15
F110	[8]01	1 Thes 1:1–2:13
F111	802	1 Thes 4:5–5:15
F112	803	2 Thes 1:12–3:10
F113	804	Heb 1:13–3:6
F114	805	Heb 4:14–6:10
F115	806	Heb 7:16–8:12
F116	807	Heb 9:24–10:23
F117	808	Heb 11:10–35
F118	809	Heb 12:23–13:21
F119	[81]0	1 Tim 1:15–3:13
F120	811	1 Tim 5:13–6:14
F121	812	2 Tim 1:12–2:22
F122	[81]3	2 Tim 4:6–22

MS Page	Arabic Number	Verses (on left-facing side)
F123	[8]14	Ti 2:13–3:15
F124	[...]	(blank)
F125	[81]6	Rev 2:8–3:5
F126	[81]7	Rev 4:8–6:7
F127	818	Rev 7:14–9:6
F128	819	Rev 10:8–11:19
F129	820	Rev 13:4–14:7
F130	[8]21	Rev 15:8–17:3
F131	822	Rev 18:9–19:7
F132	823	Rev 20:7–21:14
F133	[...]	Rev 22:14–21
lacuna		
F134	826	1 Clem 3:4–7:2
F135	827	1 Clem 10:4–13:2
F136	828	1 Clem 16:8–18:11
F137	[82]9	1 Clem 21.2–24:3
F138	830	1 Clem 29:1–33:3
F139	831	1 Clem 35:6–38:2
F140	832	1 Clem 42:2–45:1
F141	833	1 Clem 48:1–51:4
F142	[8]34	1 Clem 55:6–57:6
lacuna		
F143	836	2 Clem 2:3–6:1
F144	[...]	2 Clem 9:4–11:5

Since Arabic numerals were developed in India centuries after Alexandrinus was produced, they are of no use in determining the provenance of the text.

However, they do provide a significant clue regarding geographical location of the codex at a later date. The characters used for the page numbering are reminiscent of those attributed to the Arab poet Khalil ibn Aybak al-Safadi (13th century) in Jean Etienne Montucla's *Histoire des mathématiques*, more so than those of monk

Maximus Planudes (12th-13th century).<sup>125</sup> The poet al-Safadi was born in Safad (Palestine), died in Damascus, and lived in several Syrian towns and in Cairo.<sup>126</sup> The shape of the Arabic characters used for the numbers 4, 5, and 6 in Alexandrinus are uniquely Hindu-Arabic numerals used in Eastern Islamic countries<sup>127</sup>—with the character for the number 5 being particularly unique—and may indicate the origin of this numbering to be from thirteenth century Palestine or Egypt;<sup>128</sup> given the history of the manuscript outlined in Chapter 2, it is likely that the manuscript was numbered with Arabic numerals at a time contemporary with Athanasius II.<sup>129</sup> In Alexandrinus, the numerals 0 through 9 appear as follows:



**Figure 3.19: The Arabic numerals used for folio numeration**

The Arabic numbering, if dated to the time of Athanasius II, also provides a snapshot of the state of the codex at that time. Each leaf was numbered on the left-facing side, providing a running count of leaves throughout all four volumes of the

<sup>125</sup> Jean Etienne Montucla, *Histoire des mathématiques* (Paris: Ch. Ant. Jombert, 1758), Plate IV. In the *Reduced Facsimile* of the New Testament of Alexandrinus, Kenyon also dates the Arabic numbering to the 14<sup>th</sup> century (8).

<sup>126</sup> *Encyclopedia of Arabic Literature*, 1998 ed., s.v. “al-Safadi, Khalil ibn Aybak,” by D. S. Richards.

<sup>127</sup> Ifrah, 532. It is difficult to place the numeration on the chart pictured in Ifrah’s text. Were it not for the unclosed figure for 5 in the astronomical treatise by al-Biruni copied in 1082, the characters could otherwise date that early. In fact, a window of 11th to 17th century is possible given the fluctuations in character formation and the return of old forms to later periods.

<sup>128</sup> It is clear from examples provided by Gacek, however, that the numeration did not originate from the Islamic West (the *ghubār* numerals were native to North Africa and southern Spain) or from the state, where the Graeco-Coptic numerals were the *hurūf al-zimām*, the “numerals of registers” (Adam Gacek, *Arabic Manuscripts: A Vademecum for Readers* [Leiden: Brill, 2009], 118, 125, 232, et al.).

<sup>129</sup> Rahlfs and Fraenkel date this numbering to the 14<sup>th</sup> century (Alfred Rahlfs and Detlef Fraenkel, *Verzeichnis der griechischen Handschriften des Alten Testaments* [Göttingen: Vandenhoeck & Ruprecht, 2004], 222).

text.<sup>130</sup> This supports the idea that the text existed in the form of a single volume while it was in the hands of the Alexandrian church. More than that, however, it provides a record of the leaves that were present in the early 1300s: there were two more leaves in John's Gospel (which would have been numbered 713 and 714 in the Arabic), three more leaves in 2 Corinthians (numbered 789, 790, and 791), and another leaf in 1 Clement (numbered 835). Additionally, a leaf of unknown contents is missing between the end of Revelation and the prologue of 1 Clement; this leaf would have been numbered 825.

As was mentioned above, the quire structure in the current second volume underwent some change when it was delivered to the patriarchal cell at Alexandria. When the two-volume (and likely original) structure of the manuscript was modified to become a single-volume codex, quires 45 and 46 swapped positions before the book was bound. Thus, when the Arabic folio numeration took place, quire 45 had folios numbered 343–350 while quire 46 had folios numbered 335–342. When the book was rebound into a 4-volume set in England, the two quires were placed back in the correct order, with the Arabic folio numeration remaining as the only clue that their order had ever been reversed.<sup>131</sup>

There are two errors in the Arabic folio numeration. First, in quire 78 (V3.F65–72), a folio number is duplicated, though the exact location is uncertain because many of the folio numbers are sheared from that quire. Second, an unexplained jump occurs in the numbering at V4.F92: the previous page is numbered

---

<sup>130</sup> Some of the Arabic page numbers survive in the earlier volumes as well. The record of these numbers is recorded in the tables of Appendix A, with the Arabic number transliterated into its modern “Arabic” equivalent, followed by the current actual page in parentheses. In all cases, the pagination appears on what is currently the left-facing side of the leaves. The full numeration of the OT volumes is recorded in the OT Table of Concordance.

<sup>131</sup> Although he does not explain this re-ordering, Thompson noted it (*Facsimile*, 4:8).

759 and the numbering continues at 780. This appears to be a mistake in the count rather than indication of a lacuna, as Romans concludes on V4.F92a and 1 Corinthians begins on V4.F92b. Elsewhere the page numbers increment as expected.

### Modern Numbering of Leaves

Two sets of leaf numbers were written in the upper margin of each leaf (right page side of any opening): one in ink, at the center of the page; and one in pencil, in the upper right corner. Both of these numerations are modern additions to the manuscript.

Among the many and varied notations made by Patrick Young on the leaves of Alexandrinus, Cowper indicated that page numbers and modern chapter numbers now found in the manuscript have been added by Young himself.<sup>132</sup> The ink numeration written in the center of each upper margin was certainly scribed by Young, as the number forms are familiar when compared to other samples of Young's hand.<sup>133</sup> This pagination, which runs through all four volumes of the codex, numbers the OT leaves from 1 to 637 in the OT (V1.F5 through V3.F118) and the NT leaves from 26 to 169 (V4.F2 through V4.F144). The numeration moves away from the top center of the page wherever the manuscript is damaged (e.g., Young's pages 63 and 639 in the OT) and does not appear on "additional" leaves such as the modern flyleaves or the table of contents V1.F4. This numbering has also suffered at the hands of binders, sometimes being sheared off of the page during one of the

---

<sup>132</sup> Cowper, v. As Thompson commented, Young also wrote "in the margins of the Clementine Epistles references to the pages of his edition" (*Facsimile*, 4:5). While these marginal notes are mentioned here, only those useful to the study of the manuscript are addressed.

<sup>133</sup> For example, I have compared this writing with what is found in the manuscripts of Giacomo Barocci which were donated to the Bodleian Library; Young's handwriting is a match to the notes/numbering found in lectionary 5 (Barocci 202).

modern rebinding efforts.<sup>134</sup> Thus, Young's numeration serves as something of a record of the state of the manuscript when it arrived in England in the late 1620s; the torn pages were not a result of the codex being rushed out of a fire by Richard Bentley, for example. Apparently Young did not anticipate the severity of the trimming that occurred when the manuscript was bound into four volumes, if the placement and subsequent trimming of his pagination is any indication.

This ink page numbering is not without its flaws. In the OT, Young's numbering is consistent up through the end of 2 Esdras (V2.F185), which ends at page 460 (185 in the pencil numbering). On the next leaf (F186), Young's numbering jumps to 470 (186 in the pencil numbering). The single-leaf lacuna between these two pages may have prompted Young's jump in numbering, but the Arabic folio numeration, which he obviously made use of in the NT, would have made the size of the lacuna apparent. Young apparently made a simple mistake there and incremented the tens digit rather than the ones digit. Additionally, in the NT Young missed the central/inked page number on V4.F116 (116 in the pencil numbering)—what should have been his page 142. This leaf escaped his numeration entirely. Young was inconsistent in accounting for lacunae in his pagination, incorporating lacunae into the numbering at the beginning of the Gospels of Matthew (starting with page 26) and John (where 2 leaves are missing), but not doing so in 1 Corinthians (where 3 leaves are missing) or in Psalms.

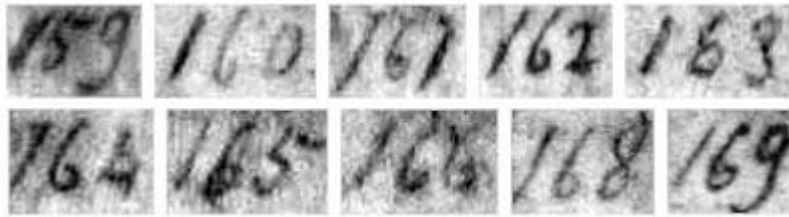
In the NT, Thompson asserted that Young provided the ink page numeration from page 26 (V4.F2) to 158 (V4.F133) and "a more recent hand" numbered pages

---

<sup>134</sup> This is discussed above in the section on Quire Structure.

159 (V4.F134) to 169 (V4.F144), which contain the Clementine Epistles.<sup>135</sup>

Although the sample size is small, the hand does appear to be sufficiently different from Young's (especially in the formation of the numbers 4, 5, and 9). It is difficult to tell from the facsimiles whether this numbering is written in ink or in pencil, but it appears much lighter than the ink other numbering attributed to Young.



**Figure 3.20: Modern, central page numeration in the Clementine Epistles**

The second set of modern leaf numeration is written in pencil in the upper right corner of each leaf. Unlike the ink numeration, the pencil numbering takes modern flyleaf pages into account and restarts the count with the first page of each volume. Early versions of the graphite pencil were in use in England at the time Alexandrinus was rebound into its four-volume state, but it is more likely that the pencil numeration was added when the manuscript was rebound in the 19th century (possibly when the full-scale facsimile was created).<sup>136</sup> When the quires were separated and recreated into six-leaf gatherings, a binder would certainly want to be able to keep track of the order of the pages; at that point the pencil numeration would be most useful.

<sup>135</sup> Thompson noted that “two numbers are omitted after 70, to allow for the two missing leaves at that place; but the lacuna of three leaves after 126 is not regarded” and also that “the leaf which follows 141 is not numbered” (*Facsimile*, 4:1).

<sup>136</sup> Thompson noted that “the correct numbers appear in the upper right-hand corners, being in pencil and being in most instances written on a discoloured ground which gives a dark shade to the facsimile, do not always appear very distinctly” (*Facsimile*, 1:1).

### **Closing Remarks on the Codicology of Alexandrinus**

A codicological analysis of any of the great biblical codices is bound to uncover some new data not processed by previous research. Even lacking physical access to the manuscript, analysis of this kind is useful in exploring Alexandrinus and adding to or correcting information about the artifact.

By studying the folio numeration of the manuscript I have identified two missing leaves that had escaped the notice of previous scholarship (a single leaf before 1 Maccabees and a single leaf before 1 Clement). This identification results in a corrected original size of the manuscript, updated information regarding the lacunae as a whole, and the intriguing possibility that some kind of separator pages must have been removed from the manuscript around the time it traveled to the patriarchal cell of Alexandria. The restoration of the two missing leaves also provides an alternate reason why two of the quires in the manuscript that had an odd number of leaves.

An examination of both paratextual features and the wear on several leaves of the codex provides a very probable binding history of the manuscript. In the proposed history, the codex was bound in two volumes from a very early time; the first volume contained Genesis through 4 Maccabees while the second volume contained Psalms through the NT, the Epistles of Clement, and the Psalms of Solomon. At some time near its donation to the patriarchal cell of Alexandria the codex was rebound in a single volume, which was the custom of the time (not universally, but for large-format Bibles). Later, when the codex was given as a gift to Charles I of England, an English bookbinder rebound the manuscript in four

volumes. Although the codex has been rebound since that original English binding, the format has stayed the same.

Categorized by Turner as a parchment codex in Category II, such a large codex was not a manuscript created merely for personal use, but rather a book to be used institutionally. It is no surprise that a deluxe edition such as Alexandrinus would contain the entirety of the Bible (and more!) or be decorated with tailpiece designs. The manuscript contained large margins (though they have suffered at the hands of binders) but a very small and beautiful script; an effort was made by each hand of the codex to maintain a uniform appearance throughout. Scholarly resources were included in the production of Alexandrinus: the Eusebian Apparatus, less than a century old at the time the manuscript was manufactured, appears nearly complete (though its canons have not survived); and a chaptering system was added to the Gospels to provide an additional tool for users of the codex. During its institutional use, an attempt was made to fit the manuscript with lection notes, though the project was not completed for some unknown reason. A curse was placed at the front of the codex by Athanasius the Humble after it arrived in Alexandria, warning that it was an irrevocable gift to the church—yet Cyril Lucar took the manuscript from Alexandria to Constantinople and then passed the codex on to England in attempt to gain protection from the Roman Church. During its history of use, liberal corrections were made in the text and portions of the manuscript were re-inked by later hands to keep the text as complete and readable as possible. Wear on many of the pages indicate this was not a Bible that sat undisturbed on a shelf.

Analysis of the quire structure and transmission units found in Alexandrinus indicates that the order of the books found in the OT and NT volumes of the codex



represent the original arrangement of the manuscript. Within the transmission units themselves we find: (1) the Gospels arranged in the familiar “canonical” order; (2) Acts followed by the catholic epistles arranged in order of decreasing length, with epistles by the same author grouped together; (3) the Pauline letters ordered according to (decreasing) size with Hebrews in the unusual position of separating the letters to the churches from the letters to individuals; and (4) the Apocalypse. Despite the fact that not all the quire signatures are written by the original scribes, the position of the signatures used by later hands appear to reflect accurately the locations of the original signatures.

Finally, a quantitative analysis of the layout features in the NT portion of the manuscript points to the work and habits of three scribal hands. Though the next chapters respond to the modern assertion that the canonical texts of the NT are written by a single scribe, statistically significant differences in the layout features indicate that this single scribe hypothesis may no longer be tenable. Historical analysis of bookbinding in the 17th century combined with paratextual and measurement data collected in the NT indicate that the codex was likely sheared all at once using a plough; while the severity of that trimming is unfortunate, the “random” quality of such a trimming mitigates concern that bias has been introduced to disturb the statistical analysis.

## CHAPTER IV

### PALAEOGRAPHY AND PARATEXTUAL FEATURES OF THE GOSPELS

In this chapter the paratextual and palaeographical features of the Gospels in Alexandrinus are examined: the letter forms of the two hands writing the Gospels; the ruling practice used throughout the codex; the practice of dividing words across rows by both of the Gospel scribes; the use of color in text and paratextual features; the implementation of subscriptions and tailpiece designs (in the Gospels and throughout the codex); the instantiation of the Eusebian Apparatus in the Gospels; and the use of *kephalaia* and *titloi* in the Gospels. For the most part, the manner in which the paratextual features were produced was determined by the scribes themselves. For example, though there is an essential “template” for production of the Eusebian Apparatus (as described in the *Epistle to Carpianus*), execution of the elements from that template are likely to vary (if even slightly) from scribe to scribe. And such is the case in Alexandrinus.

This chapter will demonstrate that there were two hands at work in the Gospels of Alexandrinus and a third hand at work in Revelation. The first scribe (NT Scribe 1) copied the Gospels of Matthew and Mark and the *kephalaia* list for the Gospel of Luke. The second scribe (NT Scribe 2) copied the Gospels of Luke and John. The remainder of the NT, excepting Revelation (which was copied by NT Scribe 3), is divided between the two (Acts through 1 Corinthians 10:8 by NT Scribe 2; 1 Corinthians 10:8 through Philemon by NT Scribe 1).

## The Hands

The scribes of Codex Alexandrinus wrote in “biblical majuscule,” a “book hand”<sup>1</sup> style which originated in the second century and was in use to the eighth century and beyond.<sup>2</sup> Cavallo describes biblical majuscule as “sober and undecorated” and as a script

which reflects in its penmanship the base models of the letters and is carried out with a visible contrast between thin horizontal strokes and fatter vertical ones (particularly *gamma*, *pi*, *tau*), while oblique strokes appear in between (*alpha*, *delta*, *lambda*). *Rho* and *upsilon* project below the baseline, and the *hastas* of *phi* and *psi* project both up and down.<sup>3</sup>

In biblical majuscule, the individual characteristics of a scribe’s hand were suppressed to follow a model form of script.<sup>4</sup> Thus, it is no surprise that there is great uniformity in the majuscule script found in the codex, enough so that Skeat and Milne identified the Gospel of Matthew through Revelation as the work of a single scribe.<sup>5</sup> The leaves of the codex are ruled and the script throughout is bilinear, with the following exceptions: the letters **ρ**, **Υ**, **Φ**, and **Ψ** purposefully extend outside of the horizontal ruling; characters undergoing *ekthesis* are written free of ruled boundaries; compressed characters at the ends of rows are of varying, reduced size.

With regard to the strokes used to form the letters, Thompson observed:

The writing of the Codex Alexandrinus is more carefully finished than that of the Codex Sinaiticus. The letters are rather wide; horizontal strokes are very fine; and there is a general tendency to thicken or club the extremities of certain letters, as *gamma*, *tau*, *epsilon*, and *sigma*.<sup>6</sup>

---

<sup>1</sup> A “book hand” uses no ligatures; all letters are independently formed.

<sup>2</sup> Guglielmo Cavallo, “Greek and Latin Handwriting in the Papyri,” in *The Oxford Handbook of Papyrology*, ed. Roger Bagnall (Oxford: Oxford University Press, 2009), 128–129.

<sup>3</sup> Cavallo, “Greek and Latin Handwriting in the Papyri,” 128–129.

<sup>4</sup> Nigel Wilson, “Greek Palaeography,” in *Oxford Handbook of Byzantine Studies*, ed. Elizabeth Jeffreys, John Haldon, and Robin McCormack (Oxford: Oxford University Press, 2008), 109.

<sup>5</sup> The scribes of the NT “bear a striking resemblance to each other in the formation of the individual letters” (H. J. M. Milne and T. C. Skeat, *Scribes and Correctors of the Codex Sinaiticus* [London: British Museum, 1938], 92).

<sup>6</sup> Edward Maunde Thompson, *An Introduction to Greek and Latin Palaeography* (Richmond: Tiger of the Stripe, 2008), 208.

Measurements made on the full-sized *Facsimile* provide an additional, quantitative description of the scribal hands. Excluding letters that project below the baseline (**P** and **Y**) or both above and below it (**Φ** and **Υ**), on average the letter size across all four volumes is 2.0-2.5mm in height, with occasional variance of  $\pm 0.5$ mm. Where the scribes began reducing character size to fit text at the end of a line (character compression), letters are down to approximately 1.0mm in height. Enlarged characters, which were written in the left margins at or near the start of a new section, range widely in size from slightly enlarged (e.g., a height of 3mm) to greatly enlarged (e.g., the 22.2mm high letter **K** on V2.F40). The enlarged characters tend to be drawn with greater height when they occur in the first row of a column (as with the example 22.2mm high **K**).

#### Paleographic Delineation of Hands in the New Testament

Historically, the palaeographic grounds for delineating hands in the NT have been based on very few differences in letter forms. Woide (1786) concluded that there were two hands at work in the NT and his palaeographic evidence involved a distinction between the letter forms of **Π** and **Δ**: NT Scribe 2 wrote longer horizontal strokes in the two characters than NT Scribe 1.<sup>7</sup> With the production of the full-size *Facsimile*, Thompson repeated Woide's argument regarding the horizontal strokes of **Π** and **Δ** but challenged Woide's assessment of the differences

---

<sup>7</sup> M. Gottlieb Leberecht Spohn, *Caroli Godofredi Woidii Notitia Codicis Alexandrini cum variis eius lectionibus omnibus* (Leipzig: Sumtibus I. G. I. Breitkopfii, 1788), 22. Woide's other distinctives for the two hands involved variations in form of the *paragraphus*, Eusebian number pair ornaments, and the *diple*. His distribution of hands is depicted in Table 5.2.

occurring in the paratextual features.<sup>8</sup> When the *Reduced Facsimile* was produced (1909), Kenyon, who determined there to be five scribes at work in the entire codex, delineated the production of the Gospels between his Scribes III (copying Matthew and Mark) and IV (copying Luke and John).<sup>9</sup> The palaeographic grounds for this delineation included the features listed in Table 4.1.<sup>10</sup>

**Table 4.1: Letter form differences for Kenyon's Scribe III and Scribe IV**

Scribe III	Scribe IV
<i>Pi</i> with minimal cross-stroke.	<i>Pi</i> with a cross-stroke that "is regularly prolonged on both sides of the perpendiculars."
	<i>Upsilon</i> has "slightly knobbed" extremities, "and it usually projects very little below the line."
	Capital letters "are rather small."

Skeat and Milne voiced disagreement with Kenyon in *Scribes and Correctors of the Codex Sinaiticus*, arguing that a single hand (their Scribe I) was responsible for all of the NT books, except for the Clementine Epistles. The single NT scribe was the same hand that copied the Octateuch, the Prophets, 1-4 Maccabees, and the books of Job through Ecclesiasticus; the other scribe (their Scribe II) was responsible for the remaining OT books and the letters of Clement. They determined that the characteristics of the hands included the features listed in Table 4.2.<sup>11</sup>

**Table 4.2: Letter form differences for Skeat and Milne's Scribe I and Scribe II**

Scribe I	Scribe II
<i>Delta</i> : "as a rule, the base projects markedly beyond the struts."	<i>Upsilon</i> : "unmistakable with its wide hollow fork and square clubbing of the tips."

<sup>8</sup>*Facsimile of the Codex Alexandrinus* (London: Trustees of the British Museum, 1879–1883), 4:5.

<sup>9</sup> See Chapter 5 for details on the rest of the NT.

<sup>10</sup> *RF<sup>NT</sup>*, 9–10.

<sup>11</sup> Skeat and Milne, *Scribes and Correctors*, 91–92.

Scribe I	Scribe II
<i>Pi</i> : the letter experiences variation between “normal” form and a form with prolonged horizontal stroke.	<i>Omega</i> : “the form with long central prong ( <b>db</b> ) occurs not infrequently at the end of lines... there is no example in the Clementines, but we may remember similar caprices in the Sinaiticus.”
Contraction of $\alpha\iota$ : “Besides $\chi(\alpha\iota)$ this hand frequently contracts $\tau(\alpha\iota)$ ...”	Contraction of $\alpha\iota$ : “Only in $\chi(\alpha\iota)$ . Apparent exceptions are found solely in corrections by the diorthotes, who in some cases at least is [Scribe] I...”

It is noteworthy that Skeat and Milne attributed two forms of contraction ( $\chi\alpha\iota$  and  $-\tau\alpha\iota$ ) to Scribe 1 (= my NT Scribe 1), but no such contractions appear anywhere in the Gospels by the original hands. There is one occurrence of a ligature/contracted  $\chi\alpha\iota$  ( $\chi$ ) at John 5:14, but it is written by the hand of a corrector.

To date, the most descriptive palaeographic analysis of the codex has been provided by Cavallo. In 1967 Cavallo put forth the position that there were *three* hands at work in the NT: “Tale possibilità, a giudicare da fondamenti grafico-stilistici, va tradotta quasi in certezza, e quindi sarei del parere di attribuire senz’altro a tre scribe l’Allesandrino.”<sup>12</sup> Commenting that both Kenyon and Skeat and Milne had noted the possible change of hand at 1 Corinthians 10:8 (based on letter shapes), Cavallo instead believed that there was evidence of just such a change, but as early as 1 Corinthians 6:18. Regardless, Cavallo’s stance rejected the separate scribe responsible for Revelation (posited by Kenyon) but accepted that two different hands were at work in the Gospels (unlike Skeat and Milne). Thus, Cavallo places the first hand at work in the Gospels of Matthew and Mark and mid-1 Corinthians through Revelation; the second hand is responsible for the Clementine epistles; and the third hand copied the Gospel of Luke through mid-1 Corinthians (see Table 5.2).

<sup>12</sup> Guglielmo Cavallo, *Ricerche sulla maiuscola biblica* (Firenze: Le Monnier, 1967), 77–78.

Cavallo describes the overall script of the codex as somewhat heavy, with thin oblique lines descending from right to left (e.g., in **Λ**, **Δ**, and **Ν**) and thick oblique lines descending from left to right (of maximum thickness for the scribe of the Clementine Epistles). His comments on individual letter forms are summarized as follows:

1. **Υ** has a very short vertical stroke throughout.
2. **Δ** can be differentiated in each of the three NT hands. The first hand (NT Scribe 1) sometimes prolongs the baseline with a small point of crowning to the left. The second hand (for the Clementine Epistles) contains the baseline between the oblique strokes of the character. The third hand (NT Scribe 2) always projects the baseline beyond the oblique strokes, thickening the horizontal stroke at the ends.
3. **Π** by the third hand (NT Scribe 2) has a horizontal stroke projecting beyond the vertical strokes, with crowning at the ends of the horizontal stroke.
4. The second hand (for the Clementine Epistles) is the heaviest of the three, apparent in the oblique stroke descending from left to right in **Υ**, the oblique ascending stroke of **Κ**, and the horizontal stroke of **Γ** and **Τ**.

Thus, for Cavallo, the primary indicators of differentiation between scribal hands—as with Woide so many years before—involves the horizontal strokes of the letters **Π** and **Δ**.

The previous palaeographical analyses of Alexandrinus performed by Woide, Kenyon, Thompson, Skeat and Milne, and Cavallo are extremely brief; in fact, the number of pages required to merely summarize their work is roughly equivalent to the combined total number of pages of their individual palaeographic analyses. To

provide a more comprehensive look at the palaeographical differences between scribes in the Gospels, the remainder of this chapter will explore the palaeography of the Gospels (and to some extent the rest of the NT books) more thoroughly than previous works on the subject.

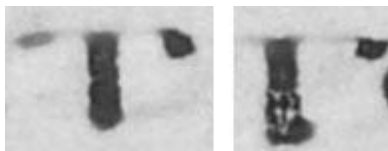
### Letter Forms

The very regular quality of the script throughout the codex allows for simple description of the letter shapes but renders delineation of scribal hands based on unique features more difficult, since there is little variation among hands. Because the focus of this analysis is on the Gospels, the competing views being evaluated are: (1) there is a single scribe at work in the Gospels (Skeat and Milne); or (2) there are two scribes at work in the Gospels (Kenyon and Cavallo). Some additional data from the NT but outside the Gospels are considered when evaluating the palaeographic features of each hand. Additionally, I have made some references below to the letter shapes found in the Apocalypse to legitimize the delineation of scribal hands used in Chapters 3 and 5 of this dissertation (the hand of NT Scribe 3 is found only in the Apocalypse). I begin by describing the letter forms common among the scribal hands and then move on to individual letter forms that show some differentiation.

Many letter forms are very regular among the scribes of the NT in Alexandrinus. As described by Cavallo, the thin oblique strokes descending from right to left and the thick oblique strokes descending from left to right are common to each of the hands. The characters *sigma*, *epsilon*, *theta*, and *omicron* are all formed with the same circular stroke and each scribe extended the horizontal stroke of



*epsilon* to the right edge of the letter. The letter *kappa* was written by all three NT scribes as a vertical stroke separated by a small horizontal space from the two angled strokes, though very occasionally there is no space between the vertical and angled strokes. The hands are indistinguishable as to square-shaped characters such as *eta*, *mu*, and *nu*; the *mu* does not have the Coptic-*mu* dip in the middle (resembling the Coptic letter *me*), but oblique lines that are straight and come to a point. Each scribe makes use of the end-of-line *nu* abbreviated as a high, horizontal stroke. The horizontal strokes of *tau* and *gamma* are crowned at the ends with a knobbed ornament (Figure 4.1).



**Figure 4.1: Crowning of the horizontal strokes of *tau* and *gamma***

Enlarged characters extending into the margins vary greatly in size in each of the hands. When these enlarged characters occur in the first row of a column, they tend toward even more exaggerated size (e.g. V4.F7a.c1.r1, V4.F10b.c2.r1, V4.F11b.c1.r1, V4.F22a.c2.r1, V4.F23b.c1.r1, V4.F27b.c1.r1, V4.F48a.c2.r1, V4.F62b.c1.r1, V4.F72b.c1.r1, V4.F74b.c2.r1, V4.F75b.c1.r1, or V4.F76a.c2.r1, to identify merely a few). The enlarged characters were written in the margin to avoid disrupting the ruling of the normal-sized characters, but they do hug the ruled text and often cross into the ruled area; NT Scribe 2 has a slight tendency to push the enlarged characters farther into the margin, but not quantifiably so.

Regarding characters that extend below the ruling (such as **P**), both scribes in the Gospels sometimes connect the extended down-reaching stroke of those characters with the vertical stroke of the character below (on the next row). NT

Scribe 1 has a tendency to make those connections whenever the opportunity presents itself; note the connection of the **Π** and **Κ** and the **Φ** and **Ν** in the Figure 4.2 and an extreme example in which the scribe does this several times in the *kephalaia* list for Mark (Figure 4.3). NT Scribe 2 made those types of connections as well (Figures 4.4 and 4.5, though the connections are offset in many cases), but exploited opportunities to do so far less often (e.g., in the *kephalaia* list for John).

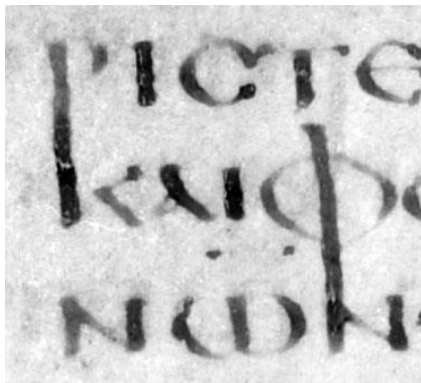


Figure 4.2: Connecting strokes for NT Scribe 1



Figure 4.3: Connecting strokes for NT Scribe 1

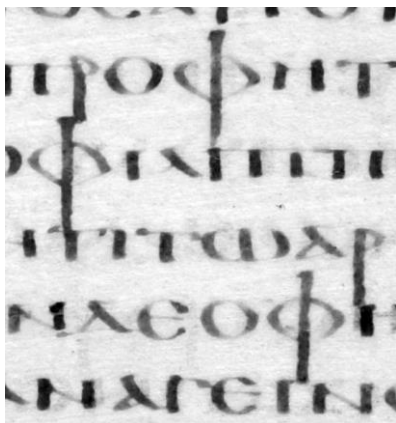


Figure 4.4: Connecting strokes for NT Scribe 2

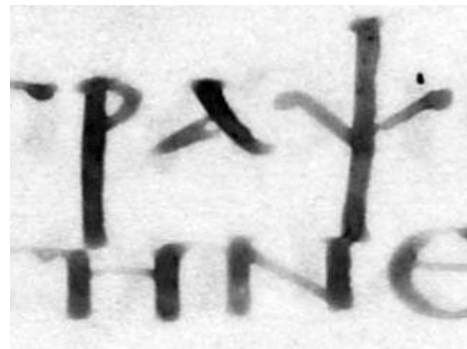


Figure 4.5: Connecting strokes for NT Scribe 2

## Π

All of the historical analyses of the letter shapes in Alexandrinus note the two different forms of the letter **Π** in the manuscript: one form has a horizontal stroke that does not extend past the *hastas* and the other does. The **Π** with the conservative

horizontal stroke is used by NT Scribe 1 in the Gospels of Matthew and Mark and in the *kephalaia* list for Luke. Where the *kephalaia* list ends (V4.F19b) and the Gospel of Luke begins (V4.F20a), the change of shape for **Π** is immediate; NT Scribe 2 (responsible for Luke and John) writes **Π** with an extended horizontal stroke. Figure 4.6 illustrates the two different forms (NT Scribe 1 on the left, NT Scribe 2 on the right).



**Figure 4.6: Letter forms for Π**

The difference of the letter form for **Π** between the domains of two scribes is pervasive enough to indicate that each scribe was responsible for his own paratextual features and rubrication. The Ammonian section numbers in Mark use the conservative-stroke **Π** (the relevant sections of Matthew are missing due to the lacuna) and in both Matthew and Mark the upper marginal *titloi* are written with the conservative-stroke **Π** as are the index titles for Mark and Luke. The book titles for the Gospels of Mark and Luke do not contain the letter **Π**, but the **ΠΕΡΙΟΧΛΙ** in the title for the *kephalaia* list of Mark uses the same letter form.<sup>13</sup> Additionally, the initial rows of Mark that are written in rubric share the same form of **Π** as the black text that follows it. In contrast, the extended-stroke **Π** in the Gospels of Luke and John occurs throughout both the black and rubricated text, in the Ammonian section numbers of Luke, in the *titloi* of John written in the *kephalaia* list.<sup>14</sup> The contrast is so striking that Skeat and Milne noted that the “main obstacle” to identifying the

<sup>13</sup> Regarding the script for **ΠΕΡΙΟΧΛΙ**, however, see the comments on tailpiece design later in the chapter.

<sup>14</sup> There are only 18 chapters in John, so none of the *kephalaia* are numbered high enough to contain a **Π**. Additionally, all of the Ammonian sections in John that would contain a **Π** were lost with the lacuna that occurs in the midst of the Gospel.

different hands in the NT as a single scribe “is presented by script IV, where a more spacious and more delicate style, induced perhaps by a finer pen and a new ink, is accompanied by the sudden and complete adoption of the *pi* with long cross-stroke for small as well as for capital letters.”<sup>15</sup>

What of Cavallo’s concern that Kenyon’s distinction between NT Scribe 2 and NT Scribe 1 at 1 Corinthians 10:8 should be moved perhaps to 1 Corinthians 6:18? Something peculiar does take place in the manuscript at the point Cavallo indicates. The forms of **Π** on V4.F94a (which ends mid-way through 1 Corinthians 6:18) most certainly exhibit the extended-stroke shape throughout the page. And the switch to the conservative-stroke **Π** is no doubt in place on V4.F96a (1 Corinthians 10:8). The forms of **Π** found in the text between those two locations, however, are less well-defined. The characters on F94b-F95b exhibit the conservative-stroke **Π** throughout the text *except* for the enlarged characters on F94b (twice) and F95a (once)—all of which exhibit the extended horizontal stroke (see Figure 4.7).

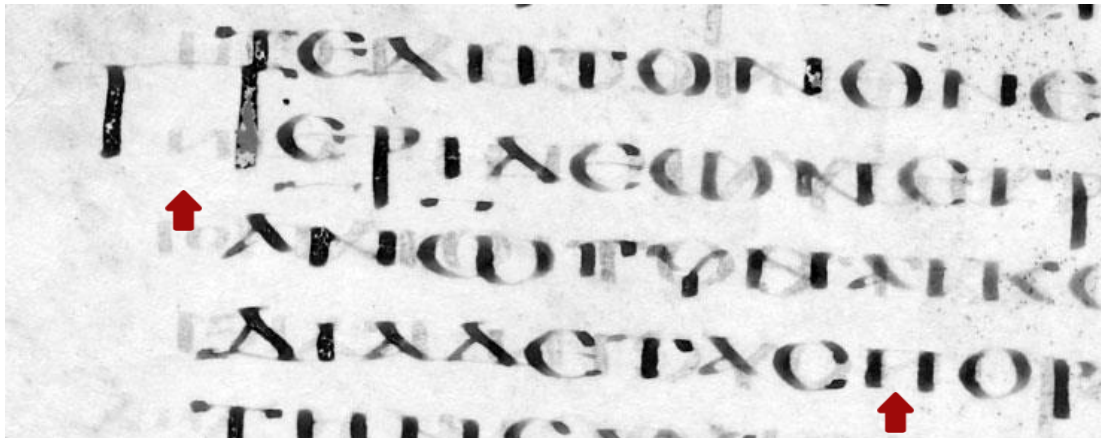


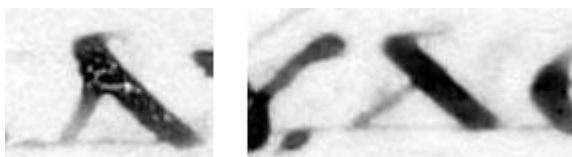
Figure 4.7: Mixing the two forms of **Π**

<sup>15</sup> Skeat and Milne, *Scribes and Correctors*, 93.

Recalling the erratic number of lines per column used by NT Scribe 2 and the constant number of lines per column used by NT Scribe 1 (see Chapter 3), it is perhaps noteworthy that the three folios exhibiting the mix of **Π**-forms vary in column size (column sizes are 52 rows for F94b, 51 rows for F95a, and 51 rows for F95b) and F96a begins a series of folios with a constant number of rows (49) per column. Cavallo raises a good question that does not abrogate the distinctive practices of the two hands in writing the letter **Π**, but does challenge the boundary of the hands at F96a (1 Corinthians 10:8). While I suspect the boundary at F96a is correct, a more satisfying answer to the mix of letter forms in F94b-F95b is needed.

### **Δ**

Woide and Cavallo both noted the difference between NT Scribe 1 and NT Scribe 2 in forming the horizontal stroke of **Δ**, while Skeat and Milne described the **Δ** of their Scribe I (encompassing both NT Scribe 1 and 2 posited by Woide and Cavallo) as having a base that extends beyond the oblique strokes. There is, however, a legitimate difference in the **Δ** of NT Scribe 1 (primarily extending the horizontal stroke to the left of the character) and NT Scribe 2 (generally extending the horizontal stroke both to the left and right of the oblique strokes). The difference is apparent in the sampled characters of Figure 4.8.



**Figure 4.8: Letter forms for Δ (NT Scribe 1 on left, NT Scribe 2 on right)**

The pattern of letter formation extends to paratextual features as well, though there are exceptions. Compare, for example, the canon number **Δ** at section 293 with the

number at section 321 in the Gospel of Matthew (Figure 4.9); there seems to be some legitimate variation in the horizontal stroke for that scribe.

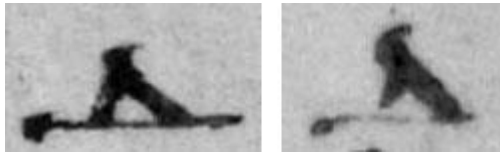


Figure 4.9: Variation of Α for canon numbers (NT Scribe 1)

## Ω

The two scribes in the Gospels of Alexandrinus are very regular in the shape of the Ω. The *ductus* of the character is such that the first stroke is the left curve down to the center of the character. The second stroke varies between a straight central prong and a central prong that descends in a slight curve down from the left before straightening. The third stroke is the downward curve of the right side that meets the central prong. As referenced above, Skeat and Milne attributed to their Scribe II (who copied the Clementine Epistles in volume 4 of Alexandrinus) an *omega* with an elongated central prong. In the *Reduced Facsimile*, Milne noted

the peculiar form of *omega* with long central prong, ( **Ω** ), occasionally employed by scribe II when crushed for space at the end of a line. Except for Papyrus 28 of the Rylands collection this shape appears to occur only in the two other great early volumes of the Bible, Codex Sinaiticus and Codex Vaticanus, and in the coeval Codex Sarravianus.<sup>16</sup>

Though the elongated prong does not occur in the Clementine letters (which Skeat and Milne attribute to caprice), it does appear at the end of an upper marginal *titloi* in the Gospel of Luke, on V4.F21a (Figure 4.10). In the title, there are other *omega* characters, but with a more typical middle prong. Skeat and Milne did not address this apparent anomaly.

---

<sup>16</sup> *RF<sup>OT</sup>*, 3:1.

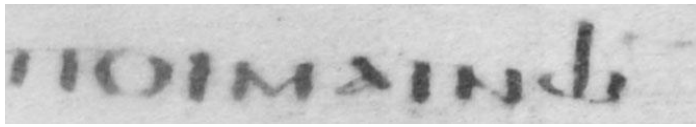


Figure 4.10: A unique *omega* in a *titlos* from the Gospel of Luke

## Α

The letter shape of Α is fairly uniform across the Gospels. In its typical form, the second stroke (the thin, oblique stroke descending from right to left and then looping back) is connected to the middle area of the first stroke (the thick, oblique stroke descending from left to right). Very rarely, NT Scribe 1 writes the letter so that the second stroke attaches to the top of the first stroke. Commenting on the full-size *Facsimile* edition, Thompson noted that when “the main stroke of the *alpha* [is] rather upright” this represents “the Coptic form of the letter”; he found this to be the case “in some of the titles of the Codex Alexandrinus.”<sup>17</sup> The upright Α does not seem to occur in the titles of the Gospels, though there is obviously variation in the slope of the oblique stroke. Predicting that reference to a “Coptic” *alpha* would be used to support Egyptian origin of the codex, Cavallo has pointed out that invoking the idea of a “Coptic” *alpha* is of no use since such a form was used even outside of Egypt.<sup>18</sup> Regardless, orthographic analysis of the Gospels (see Chapter 5) demonstrates that the spelling variants found in the codex cannot be used to argue for an Egyptian provenance.

## Υ

Kenyon identified differences in how NT Scribes 1 and 2 wrote *upsilon*, claiming that Scribe 2 added slight clubbing to the ends of the strokes and extended

<sup>17</sup> Thompson, *Greek and Latin Palaeography*, 142.

<sup>18</sup> Cavallo, *Ricerche*, 80.

the vertical stroke very slightly below the (ruling) line. I must say that after poring over the pages of the Gospels and noting a fair amount of variation in how **Y** is drawn by both scribes, and also how often it rests on the ruling line or extends below it (again, for *both* scribes), I cannot identify any such pattern.

Venturing briefly outside of the Gospels, Skeat and Milne appear to be correct that the **Y** in the Clementine Epistles is distinguishably different in the upper two strokes. They identified square clubbing at the tips, but both upper strokes tend to be drawn wide at the top, narrowing as they approach the central stroke. In addition, the left upper stroke is much more *unsteady* in how it is drawn when compared to the same character in the Gospels.

## Φ

The letter **Φ** is drawn with some regularity between the two scribes of the Gospels. The *ductus* of the character involves: a first central stroke that extends above and below the notional boundaries of the line; a second stroke to the left of the central stroke that descends away from the stroke and loops back to it; and a third stroke to the right of the central stroke that descends away from the central stroke and loops back to it. The second and third strokes are often asymmetrical where they return to the central stroke. Outside of the Gospels, NT Scribe 2 does something peculiar in James at the top of V4.F77a.c1. Both **Φ**s are ornamented with an additional S-shaped flourish not found elsewhere in the NT (Figure 4.11). The flourish is made by the first hand.



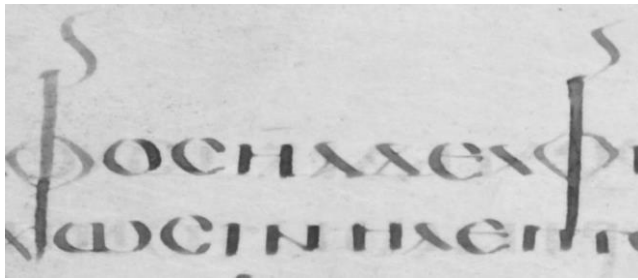


Figure 4.11: Unique Φ flourishes in James

## χ

NT Scribes 1 and 2 wrote the letter *chi* with a slight flourish in the second (descending right-to-left) stroke of the character, such that the stroke extended below the preceding character when possible (this occurs very commonly in the **εχ** combination). NT Scribe 1 curled the end of that extended stroke upward toward the preceding character while NT Scribes 2 and 3 tended to keep the stroke straight (though, at times, Scribe 2 curled it upward as well). A comparison of the differing strokes is captured in Figure 4.12.



Figure 4.12: χ with an upturned second stroke from NT Scribe 1 (left) and χ with a straight stroke from NT Scribe 2 (right)

## ζ and Ϟ

In the Gospels, the Greek character *stigma* (ζ) is used for the number 6 and the Coptic character *fei* (Ϟ) is used for the number 90. This is mentioned in passing since both characters have alternate forms when used numerically: *digamma* (Ϝ) used instead of *stigma* for the value of 6 and *qoppa* (Ϛ) used instead of *fei* for the value of 90.

### *Letter Forms in Subscriptions*

In some of the tailpieces of the Gospels, the letter forms used in the subscriptions vary considerably from what is found in the Gospel texts themselves.<sup>19</sup> A different pen, sharpened to a fine point (rather than the wider cut used for biblical majuscule), was sometimes used for both the decorative elements and the subscription text. When this occurred, the thick, oblique lines descending from left to right and the “crowns” on the horizontal strokes for **Γ** and **Τ** are missing altogether.

In the subscription text for the Gospel of Matthew (and the title of the *kephalaia* list for Mark that is below it), letters that are otherwise round in the Gospel text—such as **Ε**, **Ο**, and **Θ**—are narrow in the subscription. And **Λ**, which typically has the second oblique stroke (descending right to left) connect to the middle of the first (thicker) stroke, instead has the second stroke attach to the top of the first stroke. This shape for *alpha* occurs in the Gospel text, but only rarely.

Though the decorative *coronis* for of the Gospel of Mark is drawn with the fine-cut pen, the subscription is written with the normal, wide-cut pen. The thick oblique lines descending from left to right are retained, as are the typical letter forms. Also, the joining of the vertical strokes from **Φ** and **Ι** in the last two lines of the inscription is a typical practice of NT Scribe 1.

Like the subscription in Matthew, the decorative miniature and the letter shapes in the subscription of Luke are also written using a fine pen. Unlike the subscription in Matthew, the letters **Ο** and **Ε** are round rather than narrow and the

---

<sup>19</sup> This is what likely prompted Cowper to comment that “the inscriptions and subscriptions to the respective books, as far as they remain, are all ancient, but some must be referred to the second hand” (vi).

second stroke of the **Λ** character joins to the middle of the first stroke, rather than the top.

The Gospel of John ends with a modest *coronis* and no miniature art. The subscription appears to have been written by a pen somewhere between fine- and wide-cut; the decorative elements of the *coronis* appear to be written by the same pen. The round characters (**Ο** and **Ε**) of the subscription retained their shape and the **Λ** has typical oblique strokes.

### *New Testament Scribe 3*

Though the focus of this section is on the palaeography of the Gospels, the statistical analysis of the hands in Chapter 3 relies on data from Revelation as well, which is the only work I attribute to NT Scribe 3. To explain why this delineation is legitimate, I shall make some brief comments on the palaeographical features of this hand.

The general character of the script written by NT Scribe 3 is more regimented than those of Scribes 1 and 2; that is, apart from characters that regularly extend beyond the notional lines, NT Scribe 3's characters are all of the same size and dimensions with very little space between characters and extremely limited use of letter compacting at the end of rows. As mentioned above, the *upsilon* of this hand is unique in the way the upper strokes taper toward the vertical stroke, the left upper stroke with some unevenness. The letter *pi* mirrors that of NT Scribe 1, with the conservative horizontal stroke that does not extend beyond the *hastas*. And like NT Scribe 1, this scribe has a fondness for connecting long downward vertical strokes of characters (such as **Φ** or **Π**) with the vertical strokes on the row below them; this

scribe is slightly more awkward in doing so, as the connecting stroke sometimes must bend to connect properly. The *delta* of this scribe is similar to that of NT Scribe 2 (the horizontal stroke extending left and right of the oblique strokes), though the compact spacing between letters for this scribe often results in the horizontal stroke of the *delta* connecting the character with the letters before and after it. When this scribe writes the letter **X** there is, at the most, a hint of upward curve at the end of the second (downward) stroke. Additionally, among the NT scribes, Scribe 3 is the only original hand to use the ligature  $\chi\alpha\iota$  ( $\chi\alpha$ ), as in the final row of F131a.c1 (Figure 4.13). Combined, these unique features set apart NT Scribe 3 as a separate hand for the statistical analysis in the chapter on codicology.



**Figure 4.13: Ligature  $\chi\alpha\iota$  used by NT Scribe 3**

### ***The Hand of the Table of Contents [VI.F4a]***

The table of contents (TOC) for the codex precedes the book of Genesis in the first volume. It is of interest to the codicological discussion of Chapter 3, so some brief comments on the hand of the TOC are warranted here. No color image of the leaf is available and portions of the facsimile images (both full-size and reduced) are difficult to read.

In general, the letter forms of the TOC are very different than the biblical majuscule in the biblical books. The leaf appears to be unruled, though some horizontal lines on the page, just below and to the right of the British Museum stamp,

have the appearance of ruling marks made elsewhere in the manuscript. Regardless, the list of titles does not seem to follow any ruling (horizontal or vertical), becoming increasingly non-linear in shape toward the bottom of the page; it is difficult to determine whether damage to the leaf may contribute to the unruly appearance of the text there, however. The ink used has bled through to the other side of the leaf, which is unusual.

The pen used has a more narrow-cut tip than that of the biblical books, though there is some variation in line thickness. Additionally, the hand still crowns the tips of horizontal strokes of *tau* and *gamma*, and small knobs appear at the upper tips of *psi*. The letter *pi* has the conservative horizontal stroke that does not extend beyond the *hastas*. Round characters such as *sigma*, *omicron*, and *epsilon* are narrow in shape; *epsilon* and *sigma* are top-heavy, the downward stroke of the curve often abbreviated. The characters *mu* and *omega* are written with continuous strokes (the pen is not lifted from the page), resulting in a curved middle dip for the *mu* and an *omega* that looks more like the cursive English “w”. The second (looped) stroke of the *alpha* joins at or near the top of the first stroke rather than at its middle; this is similar to the occasional variation in form by NT Scribe 1 in the biblical text and in the subscription of Matthew. The *stigma* used for numeration looks more S-like than those used in chaptering and in the Eusebian Apparatus. The horizontal stroke of *delta* does not extend beyond the right oblique stroke, but does extend slightly beyond the left.

The overall appearance of the TOC script is less formal than that of the biblical books, but the hand is still professional-looking, bilinear, unslanted, and bold. The hand may be the personal script of one of the original scribes (there is

enough similarity with the less formal letter forms found in the subscription of the Gospel of Matthew, for example), or it may be written by another hand altogether. If by another hand, it is likely contemporary with the production of the codex. Inspection of the manuscript or color digital images of the TOC page may shed more light on the dating of this hand.

### Ruling

The ruling of vellum manuscripts was produced by impressing a hard, blunt object in a straight line across the writing surface in order to create an indentation on one side and typically producing a protrusion on the other;<sup>20</sup> a straightedge was used to guide the marking of the writing surface. With regard to horizontal ruling, Alexandrinus and Sinaiticus “are ruled from the inner edge (the ‘gutter’) to the outer margin.”<sup>21</sup> In Alexandrinus (as in Vaticanus and Sinaiticus), vertical rulings also bound the left and right margins of the columns (with a small margin between the columns). Letters are written *upon* the horizontal ruling in the codex, as opposed to the later practice of writing letters that *hang* from the ruling in the Greek minuscule;<sup>22</sup> Hatch asserted that letters in Alexandrinus “were sometimes on the line and sometimes the line passes through the letters.”<sup>23</sup>

The ruling is not uniform throughout the manuscript, however. The British Library’s *Summary Catalogue of Greek Manuscripts* identifies the ruling found in

---

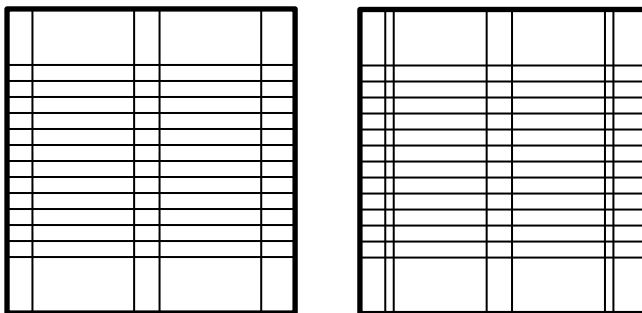
<sup>20</sup> Thompson, *Greek and Latin Palaeography*, 57.

<sup>21</sup> Thomas S. Pattie, “Creation of the Great Codices,” in *The Bible as Book: The Manuscript Tradition*, ed. John L. Sharpe III and Kimberly Van Kampen (London: The British Library and Oak Knoll Press, 1998), 64.

<sup>22</sup> Pattie, 64.

<sup>23</sup> William Henry Paine Hatch, *The Principal Uncial Manuscripts of the New Testament* (Chicago: University of Chicago Press, 1939), Plates XVII-XIX. Unfortunately, Hatch references no examples of the latter.

Alexandrinus as Leroy's category "X (also Xab, Y, and variable XYZ) 00A2 and (from 1 D.vii.f18) four extra verticals to mark indented lines, perhaps describable as K-X 20A2."<sup>24</sup> Type 00A2 describes a format in which horizontal ruling extends the entire width of the page and two columns are marked with left and right bounds, with a gap between the right boundary of the first column and the left boundary of the second column. Type 20A2 is the same as 00A2, except the outer boundaries of the two columns are ruled twice (close together). The "four extra verticals" appear in the third volume of the OT, in which all of the poetical books are written. The X types are used to describe formats in which every other horizontal line is ruled, with some every-line rulings occurring at the top and bottom of the page only (Xab). The more complex Y and Z types involve horizontal ruling that does not extend the width of the page, ending instead at a vertical ruling point.



**Figure 4.13: Leroy ruling patterns 00A2 (left) and 20A2 (right)**

Regarding variations in the ruling patterns for the manuscript, Thompson likewise noted that:

In rare instances lines are found ruled on both sides of the leaf, as in some parts of the Codex Alexandrinus. In this MS. also, and in some other early codices, ruling

---

<sup>24</sup> The British Library, *Summary Catalogue of Greek Manuscripts*, vol. 1 (London: The British Library, 1999), 223. Descriptions of the ruling types are taken from Julien Leroy, *Les Types de réglure des manuscrits grecs* (Paris: Éditions du Centre national de la recherche scientifique, 1976).

was not drawn for every line of writing, but was occasionally spaced so that some lines of the text lay in the spaces while others stood on the ruled lines.<sup>25</sup>

Unfortunately, this variety of ruling types is impossible to profile among the scribal hands without physical access to the manuscript, for the ruling is difficult to see with any consistency in the facsimile editions of the codex.

### Word Divisions at End of Line

In continuous script writing the ruling (discussed above) determined the physical boundaries of the text on the page, while the scribe determined how to fit text within those physical boundaries. If a scribe were attempting to make an exact duplicate of a manuscript, including all paratextual features involving the layout, then that feature is pre-determined by the exemplar(s). Otherwise, the placement of letters within ruled boundaries represents the choice of the scribe. Division of words across row boundaries and compression of letters at the end of a row are products of the scribe's freedom to fit letters, words, or syllables into the bounded space.<sup>26</sup> Further, Turner posited that

the rules for word division between lines are strictly observed: they are that a syllable divides after its vowel: but division is permitted between doubled consonants or two consonants, the first of which was a liquid or a nasal or a sibilant; and after a single consonant, if that letter is part of a preposition forming a compound word.<sup>27</sup>

Of the three hands found in the NT, each scribe made use of both compression and word division at the end of lines and some variation between scribes is apparent.

---

<sup>25</sup> Thompson, *Greek and Latin Palaeography*, 58. Pattie concurs: "Alexandrinus and Sinaiticus are ruled roughly every other line, but the exact pattern varies considerably" (64).

<sup>26</sup> Cf. Eric G. Turner, *Greek Manuscripts of the Ancient World* (Princeton: Princeton University Press, 1971), 19.

<sup>27</sup> Turner, *Greek Manuscripts*, 19–20; Frederic G. Kenyon, *The Palaeography of Greek Papyri* (Oxford: Clarendon Press, 1899), 31–32; William A. Johnson, "The Ancient Book," in *The Oxford Handbook of Papyrology*, ed. Roger Bagnall (Oxford: Oxford University Press, 2009), 262.



With regard to frequency of ending lines with a word division, there seems to be no significant difference between the two scribes of the Gospels:

**Table 4.3: Rows ending with word division**

	Matthew	Mark	Luke	John
<b>Rows ending with word division</b>	223 (31.63%)	812 (32.25%)	1412 (31.64%)	809 (29.42%)

Slicing the data according to column number, since the second column of text is always wider than the first column (see Chapter 3), yields the same result:

**Table 4.4: Rows ending with word division, by column**

	Matthew	Mark	Luke	John
<b>First column rows ending with word division</b>	117 (16.60%)	405 (16.41%)	694 (15.55%)	401 (14.58%)
<b>Second column rows ending with word division</b>	106 (15.04%)	387 (15.68%)	718 (16.09%)	408 (14.84%)

While frequency of word division at the end of a row is roughly constant throughout the Gospels, the practice of dividing *nomina sacra* differs between the two scribes. In the Gospels of Luke and John, five times the *nomina sacra* form of *ουρανός* is divided at the end of a line. For each instance,  $\overline{\text{OY}}$  occurs at the end of a line and the suffix ( $\overline{\text{NOIC}}$ ,  $\overline{\text{NON}}$ , or  $\overline{\text{NOY}}$ ) follows at the beginning of the next line. In the Gospels of Matthew and Mark none of the *nomina sacra* are divided at the end of a line.

### Summary

While there is some subjectivity in making palaeographic judgments—evidenced regarding Alexandrinus by the disagreements between Kenyon, Skeat and Milne, and Cavallo—the preliminary conclusion from examination of letter forms is that there

are two hands at work in the Gospels and that Revelation was copied by a third hand.

Rejecting the proposal of Skeat and Milne, I divide the copyist work as follows:

- NT Scribe 1 in the Gospels of Matthew and Mark, the *kephalaia* list for the Gospel of Luke, and from 1 Corinthians 10:8 through Philemon;
- NT Scribe 2 in the Gospel of Luke through 1 Corinthians 10:8;
- NT Scribe 3 in Revelation

Additionally, each of the scribes was responsible for his own subscriptions. At present I have reserved judgment of the hand for the Clementine Epistles.<sup>28</sup>

The three hands found in the NT can be distinguished according to the features listed in Table 4.5 below:

**Table 4.5: Distinguishable palaeographic features**

Feature	NT Scribe 1	NT Scribe 2	NT Scribe 3
Letter form of Π	Horizontal stroke ends at <i>hastas</i>	Horizontal stroke extends past <i>hastas</i>	Horizontal stroke ends at <i>hastas</i>
Letter form of Δ	Horizontal stroke tends to extend to the left only (some variation, however)	Horizontal stroke tends to extend both left and right from oblique strokes	Horizontal stroke extends beyond oblique strokes and often connects to surrounding letters
Letter form of Ω		One example of extended middle prong	
Letter form of Φ		Two examples of added flourish to vertical stroke	
Letter form of Χ	End of second stroke tends to curl up toward preceding character	End of second stroke tends to be straight	End of second stroke tends to be straight
Extended vertical strokes connecting between rows	Smoothly connects with row below often	Connects with row below, but often not smoothly	Connects with row below, but with occasional bending
Abbreviated forms	None	None in first hand	Ligature καί

<sup>28</sup> The reason for reserving judgment on the Clementine letters is two-fold: (1) the focus of this dissertation is on the Gospels; and (2) prior to the digital images being released in December of 2012, the chemical agents applied to the Clementine letters made reading them from facsimile copies next to impossible.

Feature	NT Scribe 1	NT Scribe 2	NT Scribe 3
Word division at end of line		Divides <i>nomen sacrum</i> form of <i>ουρανός</i>	

In the sections that follow, other palaeographical features of the Gospels are explored to test further the reliability of this delineation of scribal hands.

### Use of Color

Use of red/vermillion ink in the titles and first lines of columns or chapters is common in vellum manuscripts,<sup>29</sup> and in Alexandrinus the color vermillion is used in consistent ways throughout the codex: it is used for the first lines of each book, in the *kephalaia* lists, for the canon numbers in the Eusebian Apparatus, and in the tail piece art. As mentioned in Chapter 3, the vermillion ink is likely to be red lead, which (with exposure) can corrode and darken to black—which is precisely what has occurred in Alexandrinus.

#### In First Lines of Books

Vermillion ink is used to write the first line or lines of each biblical book before switching to black (for the rest of the book), though the use of vermilion/red follows no immediately discernible pattern. In most books of the NT the first 1-3 rows of the first column of text are written in red while the subsequent text is written in black; there are a few variations from this pattern.<sup>30</sup> In some cases the first (modern) verse of the book is written in red (e.g., Mark, John, James, 3 John) while in others the ink

<sup>29</sup> Bruce M. Metzger, *Manuscripts of the Greek Bible* (New York: Oxford University Press, 1981), 17; Thompson, *Greek and Latin Palaeography*, 44; Sabina Magrini, “Ink,” in *BNP*.

<sup>30</sup> Unfortunately, this use of vermillion in the OT is unrecorded and color images of the OT are unavailable.

switches to black mid-sentence or even mid-word (e.g., Romans, 2 Corinthians).

Table 4.6 indicates which lines are written in red at the start of each NT book.

According to Kenyon

The number and arrangement of these red lines varies according to the scribe's fancy. For instance, in 1 Peter lines 1, 2, 5, 6 are in red; in 1 John, lines 1 and 3; in 2 John, lines 1 and 4.<sup>31</sup>

**Table 4.6: Vermillion rows at the start of NT books**

Book	Vermillion Lines	Book	Vermillion Lines	Book	Vermillion Lines
Matthew	n/a	3 John	1, 2	2 Thess.	1, 2, 3
Mark	1	Jude	1, 2	Hebrews	1, 2, 3
Luke	1, 2, 3	Romans	1, 2	1 Timothy	1, 2, 3
John	1, 2	1 Corinthians	1, 2, 3	2 Timothy	1, 2, 3
Acts	1, 2, 3	2 Corinthians	1	Titus	1, 2, 3
James	1, 2, 3	Galatians	1, 2	Philemon	1, 2
1 Peter	1, 2, 5, 6	Ephesians	1, 2	Apocalypse	1, 2, 3
2 Peter	1, 2	Philippians	1, 2	1 Clement	1
1 John	1, 3	Colossians	1, 2	2 Clement	1
2 John	1, 4	1 Thess.	1, 2, 3		

The rubrication used in the beginning of three of the NT books (1 Peter, 1 John, and 2 John) varies from the norm in that there is an interleaving of red and black text. In the case of the use of vermillion in the first lines of 1 Peter, it is interesting to note that the vermillion text avoids the geographical place names of the recipients in the Diaspora:<sup>32</sup>

<sup>31</sup> *RF<sup>NT</sup>*, 8.

<sup>32</sup> This is taking into account the possibility of “fuzzy” boundaries regarding what is set apart in red script and examining the core content of the rubricated or non-rubricated text. In this case, it may be reasonable to assume that the core of the non-rubricated text is represented by the place names while the *κατα προγνωσιν* at the end of the non-rubricated text was included merely because it was at the end of a complete row of text.

Red	Π	ΕΤΡΟΣΑΠΟΣΤΟΛΟΣΙΥΧΥΕΚΛΕ
Black		ΚΤΟΙΣΠΑΡΕΠΙΔΗΜΟΙΣ·ΔΙΑΣΠΟΡΑΣ ΠΟΝΤΟΥΓΑΛΛΙΑΣ ΚΑΠΠΑΔΟΚΙΑΣ ΛΑΚΙΑΣΚΑΙΒΙΘΥΝΙΑΔΥΣ·ΚΑΤΑΠΡΟΓΝΩΣΙ
Red		ΘΥΠΡΟΣΕΝΑΓΙΑΣΜΩΠΙΝΣΕΙΣΥΠΑ ΚΟΗΝ·ΚΑΙΡΑΝΤΙΣΜΟΝΑΙΜΑΤΟΣΙΥΧΥ

If there was a legitimate tendency among producers of manuscripts to “universalize” the message of the New Testament epistles, then a purposeful desire not to highlight the original recipients of Peter’s letter is, perhaps, not surprising.

Finding a content-specific purpose for the interleaving of red and black text in the first two epistles of John—if there is such a purpose—is a more difficult task. In the first epistle of John, in which the first and third rows of text are written in red, the rubricating pattern is not particularly enlightening. The content of the non-rubricated, nested row involves “what we have seen with our eyes” (concerning the word of life) while the rubricated rows involve what was heard and beheld and the hands (that touched). It is difficult to imagine a content-specific reason for not rubricating the second row. And in the second epistle of John, in which the first and fourth rows of text are written in red, the rubricated text reads Ὁ πρεσβύτερος ἐκλεκτῇ (first row)... οὐκ ἐγὼ μόνος ἀλλὰ καὶ (fourth row); there does not seem to be any particular significance to what was written in rubricate versus what was written in black ink between the rubricated lines (i.e., “lady and her children, whom I love in truth”). It seems that Kenyon was probably correct in concluding that the rubrication decisions at the start of each book were merely a matter of “the scribe’s fancy.”

Does the use of vermillion in the first lines of the NT books indicate the work of a separate rubricator? For the most part the answer is no. Some of the rubricate

lines demonstrate a reduction in letter size at the end of lines in an apparent attempt to “fit” the end of a word or phrase at the end of a row. For example, in 3 John (V4.F84a) there is an effort to finish the second row with the completed word **ΑΛΗΘΕΙΑ**; however, the use of reduced letters is fairly common in that column, and there is no appreciable difference in row length between that line of text and the next. Additionally, as was determined above, the letter forms in the rubricated text match those of the proximate black-ink hand; the copyists of the Gospels were also the rubricators, at least according to the letter forms used.

### *In Kephalaia*

In the Gospel of Mark, the first chapter in the *kephalaia* list (περι του δαιμονιζομενου) is written in vermillion/red ink. All the chapter numbers of the list appear to be written in black ink, while the ornaments associated with the chapter numbers seem to vary between red and black. The first 10 chapters have supralinear marks written in red; chapters 5-10 having an additional red dot between the supralinear mark and the chapter number. Chapters 11 through 48 all have the same decorative motif of the supralinear mark, a red dot, and the chapter number; the two exceptions, both of which are missing the red dot, are chapters 23 and 24. The supralinear mark in some of the earlier chapters seems to vary between red (chapters 14-18) and black (chapters 11-13 and 19-24), but all supralinear marks in the second column of the chapter list (chapters 25-48) appear to be written in black. Chapters 3, 10, 18, 29, 35, and 37 (all having chapter titles long enough to require two or three rows) are decorated with a 7-shaped *paragraphus* below the chapter number, also written in red. Chapter 48, the final chapter and also a chapter with a title two rows in length,

has a more decorative ornament (also in red) below its chapter number. The apparent variations between red and black ink may be due to degradation of the red ink, however. At the edges of the manuscript the brightest red ink has often turned a very deep black color, so the distinction in color is sometimes difficult to determine.

As with the Gospel of Mark, only the first chapter in the *kephalaia* list for the Gospel of Luke (περι της απογραφης) is written in red ink. None of the chapter numbers or their ornaments are written in red. In fact, very few of the chapter numbers are ornamented at all. On V4.F19a, the only chapters with supralinear marks (written in black) are: 25, 26, 40, 41, 42, 54, 55, 58, 59, 60, 63, 67, 68, 70, 71, and 74 (19.28%). On F19b, the remaining chapters (75-83) all have the supralinear mark in black. The final chapter on each side of the leaf (chapters 74 and 83) has a flourish beneath the chapter number, written in black. It is possible that red ink used in this chapter list has faded to resemble the black ink, but that seems unlikely. As Chapter 5 will discuss, the *kephalaia* list for Luke appears to be part of an unusual quire formation; as such, it may have been created with haste or as an afterthought in the production of the codex. That might explain the unusual ornamentation (or lack thereof) in the chapter numeration.

For the Gospel of John, the first two chapters in the *kephalaia* list (περι του εγχανα γαμου and περι των εκβληθεντων εκ του ιερου) are written in red. The correction to the second chapter name (adding the *κ* to εκβληθεν) appears to be made by the first hand, according to the letter shape and coloration. All of the chapter numbers and their supralinear marks are written in red, and a red, 7-shaped *paragraphus* mark appears below chapters with titles occupying more than one row of text (chapters 7, 8, and 18).

### In Paratextual Features

The red/vermillion ink was used in the *coronis* ornaments, the decorative embellishments to the subscriptions, and the accompanying vignettes/illustrations found in the tailpiece designs at the end of each book in Alexandrinus.<sup>33</sup> Though some of the *coronis* designs were written in black ink alone (e.g., at the end of the Gospel of Luke), where red ink was used it was used to accent primarily black designs. As with the other features written in red, the red in these designs was *drawn* with a pen and not *painted* with a brush.

In the Eusebian Apparatus (described more fully below), a combination of black and red ink was used to write out the marginal number pairs: Ammonian sections (the upper numbers) were written in black ink while canon numbers (the lower numbers) were written in red.<sup>34</sup> This pattern was established by Eusebius and described in his letter to Carpianus. The 7-shaped paragraphus beneath the canon numbers and the occasional dot appearing between the section number and its supralinear mark are both written in red as well.

Other features written in red ink include: the 7-shaped *paragraphus* marks used to delineate major text units (see Chapter 5); *titloi* written in the upper margin of the Gospels (many of these have degraded to a black color, but several can be seen to be partially red and partially black); chapter numbers (and their accompanying

---

<sup>33</sup> Color images of these elements are available in the British Library's digital images of the manuscript for the NT and as reproductions in Skeat and Milne's *Scribes and Correctors* (Plates 10–43) for the OT.

<sup>34</sup> Many of the canon numbers have degraded to a black color; clear examples of this are found in the inner margin of first few extant leaves of the Gospel of Matthew.



*paragraphus* marks) in the margins of the Gospels; ornaments on quire signature pages;<sup>35</sup> the dots of dotted *diples*; and the superscriptions for the books of the NT.<sup>36</sup>

### Superscriptions, Subscriptions and Tailpiece Designs

The pattern for demarcation for the beginning and end of books in Codex Alexandrinus includes: (1) a brief superscription with the title of the book and minimal decoration (discussed in Chapter 3); (2) a more decorative subscription following the end of the book and set apart with a *coronis*; and (3) on occasion, tailpiece art accompanying the subscription. The producers of Alexandrinus followed the model for manuscript layout at that time (originated in the Greek East): a modest superscription and a more decoratively emphasized subscription.<sup>37</sup> Compared to the fourth-century producers of Vaticanus and Sinaiticus, however, they were unique by moving forward and adding penned illustrations/vignettes to the subscription pages of many of the books.<sup>38</sup>

In scholarly literature dealing with subscriptions there is some overlap and exchange of terms. In this study I will use the following definitions:

1. *Coronis*: the design which partitions book text from subscription text and which forms a border around any subscription text or miniatures.

---

<sup>35</sup> See, for example, the decorative figure above quire signature **ΠΘ**. The quire signature was certainly written by a later hand in a black ink that did not fade to a brownish color like the text of the Gospel below it.

<sup>36</sup> Red ink was likely to have been used in the superscriptions of the OT, but that cannot be verified at this time.

<sup>37</sup> Otto Pächt, *Book Illumination in the Middle Ages: An Introduction*, trans. Kay Davenport (London: Harvey Miller Publishers, 1986), 46.

<sup>38</sup> Robert G. Calkins, *Illuminated Books of the Middle Ages* (Ithaca, NY: Cornell University Press, 1983), 19; Walter Cahn, *Romanesque Bible Illumination* (Ithaca, NY: Cornell University Press, 1982), 17. Among extant manuscripts, narrative illustrations begin appearing in biblical manuscripts in the fourth/fifth century (Calkins, 21); the decorative miniatures in Alexandrinus, however, do not represent a full analogue to those pieces since they are neither narrative illustrations nor of the illusionistic style (i.e., accompanied by a realistic setting with a sense of depth and context).

2. Subscription: the title (and colophon, if there is any) that follows the text of a book.
3. Miniature(s): decorative artwork within a tailpiece.<sup>39</sup>
4. Tailpiece: the entire unit of post-text decoration and text, including the *coronis*, the subscription, and any accompanying artwork.

### The *Coronis*

The *coronis* is symbol of termination that underwent a great deal of transformation prior to arriving at the more decorative form used in Alexandrinus. The characteristic 2-shaped *coronis* of the first century BC was modified over time into varied shapes before being supplanted by the *paragraphus* mark and falling into disuse after the fourth century AD.<sup>40</sup> This evolution of form and intersection of usage with the *paragraphus* is likely the cause of confusion in defining the term in scholarship. Cramer, for example, describes the *coronis* as a decorated *diple* and catalogues a number of forms from the third century AD forward that often resemble the 7-shaped *paragraphus*.<sup>41</sup> Here Stephen's study of the mark is useful: "Probably we may see the real origin of the *coronis* in the other early form—the *paragraphus* plus hook; in other words it began as a mere strengthening of the *paragraphus*, though it later developed into a distinct symbol."<sup>42</sup>

---

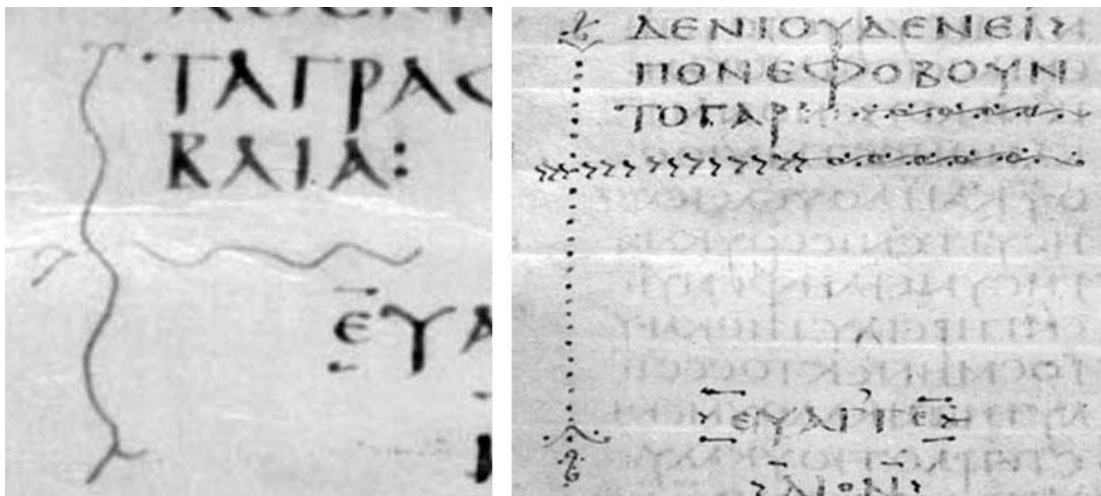
<sup>39</sup> The term "miniature" is derived from *minium* (the vermillion ink) and is not an indication of the size of the artwork (Raymond Clemens and Timothy Graham, *Introduction to Manuscript Studies* [Ithaca: Cornell University Press, 2007], 25; Calkins, 15).

<sup>40</sup> Gwendolen Stephen, "The *Coronis*," *Scriptorium*, 13 (1959). Stephen, following Wilamowitz, suggested that the term *coronis* was derived from the Greek for crow (*κορώνη* becoming *κορωνίς*) based on the bird-like shape of the 2 figure when a little beak is added (4).

<sup>41</sup> Maria Cramer, *Das christlich-koptische Ägypten, einst und heute* (Wiesbaden: Otto Harrassowitz, 1959), 80–81. Cramer describes the Coptic practice of *coronis* usage as following that of the Greeks/Byzantines until AD 604 (the Arab conquest of Egypt) at which point the Coptic practice developed independently.

<sup>42</sup> Stephen, 4.

Considering the evolution of the *coronis* as being independent of the use of the *paragraphus* explains the presence of two different terminating symbols occurring in Alexandrinus. The first set of symbols is made up of the 7-shaped *paragraphus* marks that function as unit delimiters and appear as mere ornaments to other paratextual features (such as a decoration below a chapter number). The second set of symbols is made up of the ornamental features at the end of each book which—while quite varied in design and detail—all have, at minimum, two straight segments joined at a right angle (  $\Gamma$  ). By the fourth century this “right angle” *coronis* (slightly modified) was the book termination marker in the Codex Sinaiticus. The shape of the *coronis* in that manuscript is most typically constituted from two wavy lines crossing orthogonally, though some of the variant forms are more decorative in nature (see Figure 4.14). By the fifth century, when Alexandrinus was



**Figure 4.14: *Coronides* from Codex Sinaiticus; contrast the simple, wavy lines used in the Gospel of John (left) and the more complex *coronis* design for Mark (right)**

produced, the right angle *coronis* had developed into something altogether different: the scribes of Alexandrinus, in comparison, developed more complex designs based on the combination of simple graphic elements. From the perspective of this later

stage of *coronis* form and use, Leroy described the origins of the right angle *coronis* (which he referred to as a *cul-de-lampe* or tailpiece) as being common to Greek and Coptic writing and simple in design: a combination of dashes, dots, straight or wavy lines, triangles or lozenges, forming a frame enclosed between two lines.<sup>43</sup>

The terminology when referring to these paratextual elements can be confusing. Here I use the term *coronis* to refer to the subset of the tailpiece design which partitions book text from the book's subscription and which forms a border around any subscription text or miniatures.<sup>44</sup> In Alexandrinus the *coronis* is sometimes box-shaped, forming a continuous frame around subscription text and possibly other elements; the minimum form of the *coronis* in Alexandrinus tends to be the right angle mentioned above (┐), which I will refer to as the combination of a left element and a top element (i.e., when the box is not complete, this angle would be the upper left corner of the complete box). This definition is what I work from when describing the tailpiece designs below.

### Illustrations/Miniatures

The illustrations accompanying the subscriptions in Alexandrinus are of a crude and simple style: line drawings (not paintings) made with red and black ink, drawn as freestanding elements without background, perspective, or shading to provide a sense of depth. The representative, line art of these drawings is unlike the remarkable and

---

<sup>43</sup> Jules Leroy, *Les manuscrits coptes et coptes-arabes illustrés* (Paris: P. Geuthner, 1974), 62.

<sup>44</sup> There is one exception to this rule in Alexandrinus, however. The book of Daniel (beginning with Susannah ending with Bel and the Dragon) is divided in a unique fashion, such that each section of the book ends with a *coronis* and title. Susanna 64 concludes with a box-shaped *coronis* and the title **ⲟⲣⲁⲥⲓⲥ ⲁ** (V2.F129a). Immediately following that is a box-shaped *coronis* with the title **ⲟⲣⲁⲥⲓⲥ ⲃ**, followed by Daniel 1:1. These divisions continue throughout the book, with some of the endings and beginnings sharing box-shaped *coronides*. The final subscription of the book identifies the entirety of the text as Daniel.

flourishing paintings in the Early Christian (First Golden Age) style, which is found in other, contemporary manuscripts (such as the Cotton Genesis, Vienna Genesis, Vatican Vergil or the Quedlinburg Itala manuscript).<sup>45</sup> But in the transitional Early Christian period of illustration that preceded the mature Byzantine illustrations of the sixth and later centuries, there was a great deal of variation in color, form, and style; the vignettes in Alexandrinus seem to represent an illustrative niche in that time of artistic flux. From start to finish, the codex contains 11 miniatures, with subjects such as vases, plants, and baskets of fruit (see Table 4.7).

**Table 4.7: Miniatures in the codex**

Book	Location	Miniature
Joel	V2.F14a	a vase and a pomegranate plant
Malachi	V2.F27a	a basket of fruit topped with a cross
Baruch	V2.F89b	a basket of fruit topped with a cross
Esther	V2.F148b	a transparent vase with three plants?
Hypotheses of Psalms	V3.F10a	a basket of fruit topped with a cross
Matthew	V4.F5b	an amphora
Luke	V4.F41b	a pomegranate plant and two vines
Acts	V4.F76a	an amphora
Jude	V4.F84b	two baskets of fruit
2 Timothy	V4.F122b	a plant?
Philemon	V4.F124b	(cut away)

Nearly all previous scholarship that commented on the miniatures or tailpiece designs in Alexandrinus did so only descriptively, without any attempt to analyze the artwork.<sup>46</sup> In a rare exception, Cowper took interest in the decorative elements and observed that: (1) “many of them bear a striking resemblance to similar ornaments in some of the very ancient Syriac manuscripts... all of which have been brought from

<sup>45</sup> J. A. Herbert, *Illuminated Manuscripts* (New York: Burt Franklin, 1911), 14–35; William Henry Paine Hatch, *Greek and Syrian Miniatures in Jerusalem* (Cambridge, MA: The Mediaeval Academy of America, 1931), 31–34.

<sup>46</sup> Scot McKendrick, “The Codex Alexandrinus: Or the Dangers of Being a Named Manuscript,” in *The Bible as Book: The Transmission of the Greek Text*, ed. Scot McKendrick and Orlaith O’Sullivan (London: The British Library and Oak Knoll Press, 2003), 10.

Egypt, and many of them are known to have been written there”; and (2) the baskets of fruit depicted at the end of the Catholic Epistles in Alexandrinus very closely resemble baskets of fruit in Egyptian paintings found in the British Museum.<sup>47</sup>

Baskets of fruit do appear in Syriac and Coptic artwork, but are typically joined with complex ornamental designs or with zoological elements (such as birds). Having examined a number of facsimiles and collections of illustrative elements from manuscripts contemporary to Alexandrinus, I have only encountered a single Coptic manuscript (sa 505) in which a miniature element is repeated from Alexandrinus.<sup>48</sup> Leroy posited that the decorative vase found in Coptic manuscript sa 505 (and mirrored in the miniatures of Alexandrinus in the Gospel of Matthew and Acts) was merely part of the geographically widespread Greco-Roman repertoire of images utilized in Coptic and Syriac manuscripts prior to the Christian era.<sup>49</sup> But he also grouped the miniatures from Alexandrinus with a number of Coptic *ornaments zoomorphiques et abstraits* and, what is striking, is that the miniatures from Alexandrinus look nothing like the Coptic elements in Leroy’s collection.<sup>50</sup> Again, in every instance where some similar elements occur (such as a gathering of fruit), there are far more dissimilar elements involved. An exhaustive search of Syriac, Coptic, Byzantine, and other contemporary art—which may or may not successfully locate miniatures similar to those drawn in Alexandrinus—is beyond the scope of

---

<sup>47</sup> According to Cowper, “Gentlemen of eminence in the department of Egyptian antiquities have pronounced in favour of the extreme probability that the illustrations alluded to in the manuscript are Egyptian... Ancient representations of baskets containing bread and fruit are not uncommon, but we know of none, except those from Egypt, which can be identified with the figures in the Alexandrian Codex” (B. H. Cowper, *Codex Alexandrinus. Η ΚΑΙΝΗ ΔΙΑΘΗΚΗ. Novum Testamentum graece ex antiquissimo codice alexandrino a C. G. Woide olim descriptum: ad fidem ipsius codicis* [London: David Nutt and Williams & Norgate, 1860], xxii–xxiii).

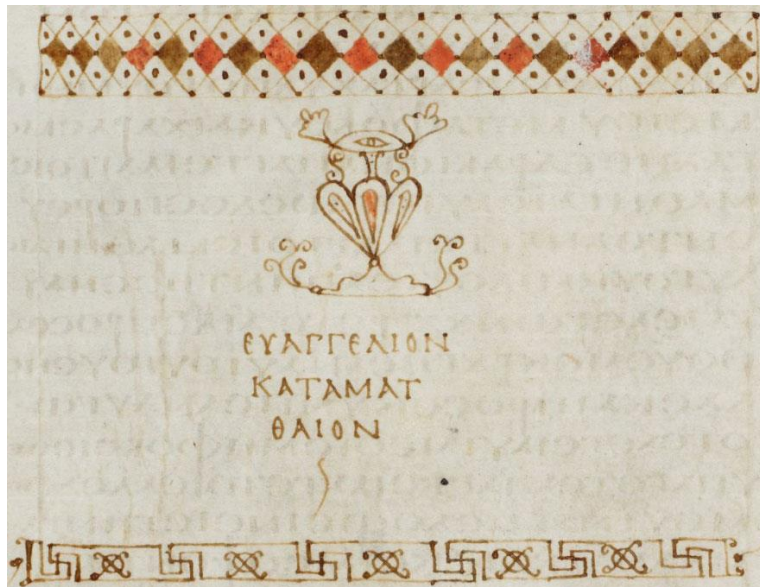
<sup>48</sup> The *amphora*, very similar to one found in manuscript sa 505, is discussed below.

<sup>49</sup> Leroy, *Les manuscrits coptes et coptes-arabes illustrés*, 63.

<sup>50</sup> Leroy does have an image from sa 505, but it is Plate 8 at the back of the volume; in his collection of illustrative elements (*Les manuscrits coptes et coptes-arabes illustrés*, 75–85), the miniatures from Alexandrinus are quite different than the rest.

this analysis. However, some observations may be made on the two miniatures that appear in the Gospels of the codex: at the end of Matthew's Gospel, the miniature art depicts a Greco-Roman vase used for storage called an *amphora* and at the end of Luke three plants are depicted. The Gospels of Mark and John are without miniature art.

The *amphora* miniature for the Gospel of Matthew is drawn in outline form, using both black and red ink (see Figure 4.15). The neck of the vase is narrow, flaring to a wide mouth. Two lines in the mouth of the vase give the opening the appearance of an eye. The vase has two S-shaped ears or handles, and from each



**Figure 4.15: Tailpiece at the end of the Gospel of Matthew**

handle springs a lotus blossom.<sup>51</sup> The body of the vase is comprised of three petal-shaped elements, each of which is simply decorated; the middle “petal” is decorated in red. The foot of the vase is wide and ornate, with what may be vines curling up

<sup>51</sup> The blossoms may be of a different type (or simply a decorative palmette or *anthemion*), but compare the profile shape of the flowers with the lotus buds of the Classical period illustrated by Willers (Dietrich Willers, “Ornaments,” in *BNP*).

and away from the vase. The miniature is drawn with a fine-tip pen rather than the scribe's typical wide-cut pen.



**Figure 4.16: Tailpiece at the end of Acts**

The vase just described from Alexandrinus is very similar to one that is drawn in a Coptic (Sahidic) biblical manuscript dating to AD 600: sa 505.<sup>52</sup> A comparison of the two images is useful in demonstrating some of the peculiarities present in the design from Alexandrinus. First, the similarities include the horn-shaped spout, a pair of handles joining the body and spout together, and a narrow bottom attached to a flared base. Both have curling vines, but the *amphora* in sa 505 has vines projecting in a V-shape from the top while that of Alexandrinus has vines curling up from its base. While generally similar, there are some marked differences as well. The body of the Coptic vase is a single heart-shaped unit with elaborate decorations, while that of Alexandrinus is formed from three inverted teardrop shapes—a pattern that is at the bottom of the decorated body of the Coptic vase, but with five teardrops (or perhaps feathers) rather than three. Thus the body of the

<sup>52</sup> The image may be found in Herbert Thompson, *The Coptic Version of the Acts of the Apostles and the Pauline Epistles in the Sahidic Dialect* (Cambridge: Cambridge University Press, 1932).



*amphora* in Alexandrinus is entirely decorative, for no such vase could have been manufactured on a potter's wheel, while the Coptic *amphora* is both realistic and decorative. Since use of the *amphora* was ubiquitous to the Hellenized world, the unrealistic *amphora* in Alexandrinus suggests that the artist was either from a region in which the vases were not in use (and he was simply imitating an image he had seen elsewhere), or he was unconcerned with representing a realistic vase. With so little comparative evidence, the unusual composition of the vase remains something of a mystery (as does its provenance).

Venturing out of the Gospels for a moment, the *amphora* depicted in the tailpiece of Acts (see Figure 4.16) appears to be an imitation of the *amphora* at the end of the Gospel of Matthew. The vessel is drawn with less confidence (note the corrective stroke around the top of the central "petal" of the body and the asymmetry of the foot and handles), fewer embellishments (the lotuses and other adornments are missing), and without any added color. The *meander* (or Greek key design)<sup>53</sup> below the *amphora* imitates the design found at the end of Matthew, though the right end of the ornamentation disturbs the roughly symmetrical balance of the figure by adding a sixth crossed circle; this difference is likely due to repeating the *meander* pattern enough times to fill the column width on each of the two leaves.

In the tailpiece for Luke, three plants are arranged such that two leafy plants flank a third plant with blossoming stems (see Figure 4.17). Although decorative use of plants in manuscripts did not achieve its apex until the fifteenth century, the symbolic significance of decorative plants (often with classical roots) began much

---

<sup>53</sup> Unfortunately, with regard to any symbolic meaning inherent to the design, "there has been little interpretative research of the meander in representations of the Roman Empire and early Christianity" (Dietrich Willers, "Meander," *BNP*). The same *meander* pattern, reversed, is found in Plate 28 of Cramer.

earlier.<sup>54</sup> The central plant appears to be a stylized pomegranate tree, with fruit at the end of each branch. Each pomegranate is decorated with a three-pronged “crown,” which is key to identifying the fruit.<sup>55</sup> The pomegranate, originally associated with Persephone and her journey into the underworld in pagan mythology,<sup>56</sup> was re-appropriated into a symbol of the death and resurrection of Jesus for Christians.<sup>57</sup> The three plants may perhaps symbolize the three crosses on Golgotha (the two leafy plants representing the crucified thieves, the pomegranate tree pointing to the death and resurrection of Jesus), or perhaps the pomegranate is used symbolically while the flanking plants are merely decorative. Coupling the fruit’s symbolic nature with its ubiquitous presence through the ancient Orient and Egypt, its appearance in the tailpiece of this Gospel is not useful in locating the scribes of Alexandrinus geographically.



**Figure 4.17: Three plants from the tailpiece of the Gospel of Luke**

<sup>54</sup> Celia Fisher, *Flowers in Medieval Manuscripts* (London: British Library, 2004), 5.

<sup>55</sup> Note the similar design of the pomegranates on either side of the very Roman-looking Christ pictured in the fourth century Hinton St. Mary Mosaic kept by the British Museum ([http://www.britishmuseum.org/explore/highlights/highlight\\_image.aspx?image=ps148532.jpg&retpage=21261](http://www.britishmuseum.org/explore/highlights/highlight_image.aspx?image=ps148532.jpg&retpage=21261)).

<sup>56</sup> Christian Hünemörder, “Pomegranate,” in *BNP*. The fruit was also associated with fertility because of its many seeds. Cf. Celia Fisher, *The Medieval Flower Book* (London: British Library, 2007), 99.

<sup>57</sup> George Wells Ferguson, *Signs and Symbols in Christian Art* (London: Oxford University Press, 1961), 37.

Briefly venturing outside the Gospels once more, another pomegranate plant is depicted in the miniature for the book of Joel. The design of the plant is somewhat different in that some broad leaves occur on the lower two branches and the three-pronged “crown” of the fruit is drawn in black (instead of red) and in a more angular fashion. What may be a vase with a long neck and foot sits to the left of the plant. Unlike the Gospel of Luke, the book of Joel makes mention of the pomegranate (ῥόα) as being one of the crops to be destroyed by God’s judgment (Joel 1:12). That the pomegranate in the miniature is bearing fruit may be related to the promise of deliverance given in Joel 2:22, in which the pastures turn green and the trees bear their fruit.

Apart from the miniatures discussed above (both in the Gospels of Matthew and Luke and in Acts), there are two others in the NT: at the end of Jude (and the General Epistles) the miniature art depicts two wicker baskets containing an abundance of multi-colored fruits; and following 2 Timothy there is an unusual tree-like design that mimics the motif found in the vertical portion of the *coronis*. Any tailpiece art that may have accompanied the ending of the Pauline epistles has been cut away from the manuscript, leaving only the *coronis* work.

### Tailpiece Design and Scribal Hands

The tailpiece, as defined above, is the aggregate of the constituent parts already described: the *coronis* (which decoratively separates the subscription from the text of a book), the subscription (which, in Alexandrinus, includes the title of the book and any collection descriptor), and possible miniature art. Because other paratextual features in the codex vary by scribal hand, it is possible that tailpiece


design may do the same. The elements of the tailpiece designs found in the NT are collected in Table 4.8 and the hands of the associated NT texts (which have already been delineated according to palaeographical features) are included for reference.

*Coronis* elements are marked according to which components of a notional box encompassing the subscription text (and miniatures, if included) are present.<sup>58</sup>

**Table 4.8: Tailpiece elements present in NT books**

Book	Coronis Elements Present				Miniature	Scribe of Associated Text
	Top	Left	Bottom	Right		
Matthew	X		X		amphora	NT Scribe 1
Mark	X	X				
Luke	X	X			3 plants	NT Scribe 2
John	X	X	X	X		
Acts	X		X		amphora	
James	X	X	X	X		
1Peter	X	X	X	X		
2Peter	X		X			
1John	X	X		X		
2John	X	X	X	X		
3John	X	X	X	X		
Jude	X	X			2 fruit baskets	
Romans	X	X				
1Cor.	X	X	X	X		NT Scribe 1
2Cor.	X	X				
Galatians	X	X				
Ephesians	X	X				
Philippians	X	X		X		
Colossians	X	X	X	X		
1Thess	X	X	X	X		
2Thess	X	X				
Hebrews	X	X	X	X		
1Timothy	X	X				
2Timothy	X	X			plant?	
Titus	X	X				
Philemon	X	X			(cut away)	
Revelation	X	X				NT Scribe 3

<sup>58</sup> A simple, horizontal divider between book text and subscription text would be marked as having the “top” component present but no others. *Coronides* like those found in Codex Sinaiticus (Figure 4.14) would be marked as having “top” and “left” components.

Every book in the NT has the top element of the *coronis* present (some horizontal divider between book text and subscription) and most have the left element as well. Where the left element is lacking (in the Gospel of Matthew, Acts, and 2 Peter), there is always a bottom element instead. The “top-left” *coronis* configuration mimics the traditional *coronis* design (  ), so it is not surprising that it occurs frequently.

As noted above, Skeat and Milne used colophon (i.e., tailpiece) design as a means of distinguishing between scribal hands. Seeing only two hands at work in the entirety of the codex, their Scribe I was responsible for all the books of the NT (minus the Clementine Epistles) and for several books of the OT. They described the colophon work of this scribe as follows:

In Job, Proverbs, Song of Songs, and Wisdom, the *coronis* is still recognizable as such, but has sunk to a lower position than in the Vaticanus and Sinaiticus, so that the cross-bar runs beneath the subscription. The colophons in the other books have lost all semblance of a *coronis*, and are half-way (some indeed the whole way) to the later panel-form of tail-piece. In contrast to [Scribe] II this scribe uses a great variety of designs based on a definite range of elements...<sup>59</sup>

They describe their Scribe II as employing “only one pattern” involving “hooks and spirals, recognizably different from the same pattern when employed by” Scribe I.<sup>60</sup>

In the *Reduced Facsimile* Milne added that “even when the first hand employs a similar type [of hook and spiral design], as at the end of Obadiah (f. 289b) and Zephaniah (f. 294), the difference is unmistakable to a perfunctory scrutiny.”<sup>61</sup>

How sound is this analysis of tailpiece designs put forward by Skeat and Milne? On the positive side, arguing that a single scribe is responsible for the repeated hook and spiral patterns is reasonable, even if one might argue with Milne

---

<sup>59</sup> Skeat and Milne, *Scribes and Correctors*, 91.

<sup>60</sup> Skeat and Milne, *Scribes and Correctors*, 92.

<sup>61</sup> *RF<sup>OT</sup>*, 3:1.

regarding some of the particulars. On the negative side, arguing that only one scribe is responsible for the canonical NT books *because his tailpiece designs show great variety* is hardly compelling. The substance of the argument is that the art of their Scribe I is distinguishable as the work of a single scribe only because it is not the art of Scribe II.

So are there any distinguishing features among the three scribes? Because of the great variety of designs used in the NT *coronides*, none of the individual elements is enough to demonstrate delineation between the scribal hands. But there are some features that seem to be unique to each of the three hands. NT Scribe 1 decorates mesh patterns with dots in the middle of the rhombus shapes defined by the mesh (see the *coronides* of Matthew, Philemon, and the *kephalaia* list for Luke), whereas NT Scribe 2 only dots the crossed lines of the mesh (see the *coronides* of Luke and Jude).<sup>62</sup> NT Scribe 1 also curves the outer edges of mesh patterns (e.g., the left and right boundaries of the vertical mesh strip for Philemon), something which NT Scribe 2 never does. NT Scribe 3 (responsible only for Revelation) is the only hand to create an elaborate plait design in his *coronis* borders (surprisingly, without an accompanying miniature). The upper design is far more complex than any of the designs of the other two hands, which consist primarily of individual sigils (such as *diples*) being strung together.

Regarding the possibility of identifying hands based on miniatures, the scarcity of miniatures in the NT is not helpful. Only 5 miniatures appear in the NT, with the possibility that a sixth was removed from Philemon/the Pauline letter

---

<sup>62</sup> The vertical panel of mesh in Jude may be an exception to this rule, though the triangular elements on the left and right sides of the mesh—in which there are dots—have been redefined as independent shapes by being outlined in red.

collection. As a result, NT Scribe 1 is only responsible for 2 extant miniatures (an *amphora* and an abstract plant design) and NT Scribe 2 is only responsible for 3 miniatures (some plants, an *amphora*, and fruit baskets). The single shared element between the two hands (the *amphora* and *meander* design) does indicate different artists, as previously concluded.

Scarcity of miniature art also renders finding a pattern in the placement or selection of miniatures nearly impossible. The decision to place a miniature at the end of a book in the NT could be symbolic (the position and/or miniature having significance), practical (a function of limitation of space, time, or skill), rigorous (it was in the exemplar, therefore it will be in the copy) or capricious; with more than one scribe involved, the reasons may vary among them. Lack of space was not an apparent limitation on adding miniatures, as the endings of the Gospels of Mark and John are followed by sufficient blank space to contain artwork. The repeated *amphora* and *meander* design could serve like bookends to the Gospels and Acts, but the subscription at the end of the Catholic Epistles groups Acts with the Catholic Epistles and not the Gospels.<sup>63</sup> Also, it appears meaningful that a basket of fruit is depicted at the end of the Catholic Epistles, the decoration either indicating the end of a collected unit or something more symbolic. However, the missing tailpiece for the Pauline Epistles and the lack of a miniature in Revelation mitigate the possibility that the end of the collection unit is being signaled.

---

<sup>63</sup> Two exemplar traditions could be in conflict, as evidenced by two grouping schemes overlapping. The Gospels, being uniquely proto-Byzantine in their text, may have come from one tradition while Acts and the Catholic Epistles came from another. But what then would prompt NT Scribe 2 to repeat the design from Matthew in at the end of Acts?

### Summary

The tailpieces in Alexandrinus represent a unique chapter in the history of biblical codex design. The *coronides* of Alexandrinus are more complex and varied than those of Sinaiticus in the previous century, incorporating a number of new elements and expressing a greater range of scribal creativity. The miniatures in the codex, while sharing superficial resemblance to decorations in some contemporary Coptic and Syriac manuscripts, constitute a singular style of line art that is not painted, but drawn by the scribes. The zoological or complex designs that accompany Coptic and Syriac art are missing from Alexandrinus and qualify the codex's niche in manuscript illumination as something unusual.

Skeat and Milne sought to demonstrate that a single scribe was at work in the canonical NT books of Alexandrinus by claiming that a unified style of *coronis* art defined by a “great variety of designs based on a definite range of elements.” While the variations in design between NT Scribes 1 and 2 are minor, the argument of Skeat and Milne ultimately falls flat. Defining the unity through variety ignores minor differences in the art work and dismisses the legitimate palaeographical differences between the hands.

### Eusebian Apparatus

The Eusebian Apparatus is a paratextual feature found in many Gospel manuscripts of the fourth century and later. The Apparatus is attributed to the Christian historian and apologist Eusebius of Caesarea (c. AD 260–339),<sup>64</sup> and it functions as a cross-referencing device to link parallel passages in the Gospels. The Apparatus seems to

---

<sup>64</sup> *The Oxford Dictionary of the Classical World*, s.v. “Eusebius.”



have enjoyed some popularity, as it appears not only in Greek Gospel manuscripts, but also in the Latin, Syriac, Coptic, Gothic, Armenian and other versions.<sup>65</sup> It is a standard paratextual feature particularly in the Byzantine Greek New Testament manuscripts.<sup>66</sup>

The Apparatus, in its original form, consists of two components: the Eusebian canons and the Ammonian sections. The Eusebian canons are a collection of ten tables (or *κανόνες*) that align parallel pericopes in all four Gospels (Canon I), parallel pericopes that appear in three of the Gospels (Canons II through IV), parallel pericopes that appear in only two of the Gospels (Canons V–IX), and pericopes that are unique to any one Gospel (Canon X).<sup>67</sup>

In manuscripts where the canon tables are extant, the canons typically appear just before the collected Gospels and commonly involve elaborately decorated columns, illustrations of the evangelists, floral patterns, and the like. The decoration

---

<sup>65</sup> Bruce M. Metzger and Bart D. Ehrman, *The Text of the New Testament*, 4th ed. (New York: Oxford University Press, 2005), 38.

<sup>66</sup> Harold H. Oliver, “The Epistle of Eusebius to Carpianus: Textual Tradition and Translation,” *NovT* 3, no. 1 (January 1959): 138.

<sup>67</sup> The Apparatus is lacking a table for parallel passages common to Mark and John as well as parallels common to Mark, Luke, and John; see Carl Nordenfalk, “The Eusebian Canon-Tables: Some Textual Problems,” *JTS* 35 (1984): 96. Apart from Canon I, which shows parallels among all four Gospels, the other canons show the following parallels: Canon II has parallel sections in Matthew, Mark, and Luke; Canon III has parallel sections in Matthew, Luke and John; Canon IV has parallel sections in Matthew, Mark, and John; Canon V has parallel sections in Matthew and Luke; Canon VI has parallel sections in Matthew and Mark; Canon VII has parallel sections in Matthew and John; Canon VIII has parallel sections in Luke and Mark; Canon IX has parallel sections in Luke and John; and Canon X lists all the unique pericopes.

A quick calculation on the possible combinations of three, two, one, and no parallel readings ( $1 + 4 + 6 + 1 = 12$ ) reveals that ten canons are not enough to include all possible parallels. It is postulated with reasonable probability that Eusebius purposely chose a *ten* canon system based on the idea that the number ten, “which contains the end of all numbers, and terminates them in itself, may truly be called a full and perfect number, as comprehending every species and every measure of numbers, proportions, concords, and harmonies” (Carl Nordenfalk, “Canon Tables on Papyrus,” *DOP* 36 [1982]: 29). Nordenfalk is quoting Eusebius from his *Oration in Praise of Constantine* (AD 335). McArthur suggests that the reason why the two “missing” canons are absent is presumably “because, in the judgment of Eusebius, there were no sections which Mk and Jn had in common, or which Mk, Lk and Jn alone had in common” (Harvey K. McArthur, “The Eusebian Sections and Canons,” *CBQ* 27 [1965]: 251). However, Nordenfalk provides examples of parallels that would fit into the missing canons.

provides the tables with “an appearance of loftiness”<sup>68</sup> and demonstrates through *ten* canons the harmony of the Gospels. If the Etschmiadzin Gospels manuscript (AD 989) accurately represents the canons produced by Eusebian scribes in Caesarea (as Nordenfalk suggests), then a *tholos* (or circular structure or rotunda) drawn at the end of the canons emphasizes “the symbolic value of the Tables,” in that “they function as a propyleum through which we approach the *sanctum sanctorum* of the Holy Writ.”<sup>69</sup> Though the canons were later eliminated in some manuscripts, which instead reproduced the rows of canon data at the bottom of each page of the Gospels<sup>70</sup> (especially in Syriac manuscripts) or in proximity with the marginal Eusebian numbers (section and canon number pairs), the tables were reproduced in Latin, Syriac, Gothic, Armenian, Georgian, and Ethiopic manuscripts.<sup>71</sup>

The canons were to be used in conjunction with the second component, namely, the Ammonian sections. Attributed to Alexandrian-born Ammonius Saccas (c. AD 175–242),<sup>72</sup> the third century Christian Bishop of Thmuis,<sup>73</sup> this paratextual device divides each of the Gospels into sequentially numbered sections. The total number of sections in each of the Gospels is: 355 in Matthew; 233 in Mark (without

---

<sup>68</sup> Nordenfalk, “Canon Tables on Papyrus,” 30.

<sup>69</sup> Nordenfalk, “Canon Tables on Papyrus,” 30.

<sup>70</sup> As McArthur suggests, this simplified system removed the second step of the original three step lookup process: namely, turning to the canons to look up the parallel passages (“The Eusebian Sections and Canons,” 251).

<sup>71</sup> Nordenfalk, “Canon Tables on Papyrus,” 30. In some manuscripts both the canons were reproduced *and* an alternate system of presenting the canon data in the margins of the page. Perhaps the convention of reproducing the canons before the Gospels became so entrenched in the church’s understanding of how a Gospels manuscript should appear that the canons continued to be attached to the Gospels even when they were no longer needed.

<sup>72</sup> *The Oxford Dictionary of the Christian Church*, 3rd ed., s.v. “Ammonius Saccas.”

<sup>73</sup> D. C. Parker, *An Introduction to the New Testament Manuscripts and Their Texts* (Cambridge: Cambridge University, 2008), 316; Metzger, *Manuscripts of the Greek Bible*, 42; Kurt Aland and Barbara Aland, *The Text of the New Testament*, trans. Erroll F. Rhodes (Grand Rapids: Eerdmans, 1987), 175. Parker notes Eusebius’ indebtedness to Ammonius, and indeed his letter to Carpianus does imply that Eusebius used Ammonius’ work—to what extent is unknown. For further commentary on Ammonius, see Eusebius’ *Ecclesiastical History* 6.19.

the long ending; when Mark 16:9–20 is included, the total rises to 241); 342 in Luke; and 232 in John.<sup>74</sup>

Eusebius capitalized on the divisions created by Ammonius and used them as an opportunity to link sections of one Gospel to the others where one or more parallels (Canons I–IX) existed, or to show that no such parallel existed in the other Gospels (Canon X). The parallels are not intended to link separate occurrences of identical incidents, but rather to link pericopes “which expressed some common concept or activity.”<sup>75</sup> Use of the canons is explained by Eusebius in his letter to Carpianus.<sup>76</sup>

In each Gospel, the Ammonian section numbers appear in the left margin, each one incrementing in value and accompanied by a table number (ranging I–X). To look up the parallel passages of a pericope, both numbers are needed; the reader uses the second (canon) number to determine which table to look at (I–X) and then looks for the first (Ammonian section) number in the table under the appropriate Gospel column. Parallel passages are listed horizontally in the table. For example, the Eusebian number **Κ/Λ** in Mark’s Gospel is found at Mark 2:1. To find parallel passages, the reader goes to canon I (as indicated by **Λ**) and scans down the second column of numbers to locate **Κ**; horizontal to this table entry the reader finds that the

---

<sup>74</sup> Interestingly, the Syriac text may use a different number of divisions. According to Hall, one manuscript has 360 divisions in Matthew; 240 in Mark; 348 in Luke; and 232 in John (Isaac H. Hall, “Notes on the Beirût Syriac Codex,” *Journal of the Society of Biblical Literature and Exegesis* 2, no. 1 [June 1882]: 13).

<sup>75</sup> McArthur, “The Eusebian Sections and Canon,” 254; but see preceding pages for examples of some of the surprising links made by Eusebius.

<sup>76</sup> The Greek text of the letter is available in NA<sup>27</sup>, pages 84\*–85\*. What Eusebius described in this letter is what was implemented in Alexandrinus: Ammonian section numbers occur marginally in the Gospel texts (in the same black/brown ink of the text), each with an accompanying canon number supplied as a “rubricate note” (κινναβάρως ὑποσημείωσις)—that is, the canon numbers appear in vermillion ink, the color of κιννάβαρι.

parallel passages for this pericope are found in Matthew at Ammonian section 70 (Θ), in Luke at section 37 (ΛΖ), and in John at section 38 (ΛΗ).

Codex Alexandrinus was produced with the Eusebian Apparatus; regrettably, as with all of the oldest Greek codices that use the Eusebian Apparatus (Codex Sinaiticus, Codex Ephraemi, and Codex Bezae), the Eusebian tables that commonly prefix the Gospels are missing from Alexandrinus due to a large lacuna. The Ammonian section numbers are found in each of the four Gospels, however, and are written in black to the left of any column of text; each accompanying Eusebian canon number is written in vermillion. The section number is written parallel to the line of text it is marking. The standard format of these numbers is (in order, vertically): a supralinear mark; the Eusebian section number (sometimes marked with a point above the number); the canon table number; a 7-shaped *paragraphus* mark. For example:

<sup>̅</sup>ΜΕ  
 §  
 7

However, the ornamentation used in the creation of the Apparatus has a high amount of variability in each of the Gospels. In the extant portion of the Gospel of Matthew the most “default” format is (from top to bottom): a supralinear mark (in black), a dot (in red), the section number (in black), the canon number value (in red), and a 7-shaped *paragraphus* (in red). Variants include omission of the *paragraphus* (§278), omission of the dot (§278, §292) or the addition of a supralinear mark (in red) over the canon number value (§348, §351). The same default format and variations occur frequently in the Gospel of Mark. The default format for Apparatus number pairs switches in the Gospel of Luke to include a supralinear mark (in red)

over the canon number value. However, the same type of variations occurring in the Gospels of Matthew and Mark occur in this Gospel as well: omission of the dot, omission of the *paragraphus*, and omission of the supralinear mark over the canon number value. The Gospel of John shares the same default format and format variations as the Gospel of Luke.

Despite the high amount of variability of the format of the Apparatus in each of the Gospels, there is a distinct difference in default (or most typical) number pair formatting between the domain of NT Scribe 1 (the Gospels of Matthew and Mark) and NT Scribe 2 (the Gospels of Luke and John). The ability to distinguish between these two default patterns supports the palaeographical evidence that both of these NT scribes were responsible for the reproduction of his own paratextual features in Alexandrinus (in the case of the Apparatus, the unique **Π**-shape for each scribe is present in the section numbers).

### Transmission Errors

For there to be errors in transmission of the Apparatus, there is presupposed a single, correct model to be implemented. In this study, the 27th edition of Nestle and Aland's *Novum Testamentum Graece* (NA<sup>27</sup>) is presumed to be the correct (or normalized) model against which the Eusebian Apparatus of Alexandrinus is compared. With a model in place, transmission of the Eusebian Apparatus has two possible points of failure, which may result in five types of potential errors; while I have discussed these possible errors elsewhere,<sup>77</sup> the two transmission variants of concern for this analysis are a variation of section number *position* (i.e., a Eusebian

---

<sup>77</sup> W. Andrew Smith, "Transmission Peculiarities of the Eusebian Apparatus in Codex Alexandrinus" (paper presented at the annual meeting of the SBL, Chicago, Illinois, 18 November, 2012).

number pair that is placed in the incorrect marginal location) and a variation of the canon number value. I recorded these two Apparatus values from the Gospels of Alexandrinus with the corresponding normalized data from NA<sup>27</sup> in Tables D.1-4 of Appendix D; variants are highlighted with bold text.<sup>78</sup>

While in-depth study of the transmission of the Eusebian Apparatus is often lacking in manuscript studies, with regard to the questions asked (and answered) in this analysis, Jongkind's work on the Eusebian Apparatus of Sinaiticus<sup>79</sup> is particularly influential. Rather uniquely, Jongkind evaluated deviations in the placement of Eusebian number pairs and deviations in the canon numbers themselves to look for habits among the scribal hands. Other major studies of the early codices lack analysis of this kind, though often this is because the Eusebian Apparatus was not present in the manuscript.<sup>80</sup> Two years after completing my analysis on the Eusebian Apparatus I chanced upon McFall's unpublished 2007 research,<sup>81</sup> and have updated the analysis below to interact with his (very similar) findings; though his focus was a collation of Codex Basiliensis, his comparison of the Eusebian Apparatus in three manuscripts is salient to this analysis.

---

<sup>78</sup> Regarding modern chapter and verse notation, a brief comment is necessary. In the comparative tables (Tables D.1–4), verses have been divided according to their cola: first cola are identified with a suffixed “a”, second cola with a suffixed “b”, etc. Because divisions may occur with the beginning of dialogue, redundant quotative frames are assigned separate cola. Divisions that occur outside of cola boundaries are indicated with a “+”.

<sup>79</sup> Dirk Jongkind, *Scribal Habits of Codex Sinaiticus* (Piscataway, NJ: Gorgias Press, 2007), 109–120 and Appendix IV.

<sup>80</sup> Such is the case, for example, with Vaticanus. In Parker's analysis of Bezae, he posits that the Ammonian sections were added to the manuscript by a later hand in Syria between AD 550 and 600 and thus his coverage of the sections is minimal (D. C. Parker, *Codex Bezae: An Early Christian Manuscript and its Text* [Cambridge: Cambridge University Press, 1992], 41–43, 282).

<sup>81</sup> Leslie McFall, “A Full Collation of the Four Gospels of Codex E Against the Universal (Byzantine) Text with a Collocation of the Eusebian Apparatus in Sinaiticus, Alexandrinus, Codex E, and NA27” TMs [printed and bound copy], November, 2007, Tyndale House Library.

In the paper delivered at the SBL Annual Meeting in Chicago, I introduced a transmission error I have termed a *cascading error*.<sup>82</sup> A cascading error occurs when a list of data values is being copied and a value in the sequence is omitted or duplicated in the copy, resulting in a series of error values following the duplicated or omitted value. Errors initiated by a cascading error continue until corrected, either through an error that offsets the original error or through the vigilance of the scribe.<sup>83</sup>

In Eusebian number pairs, cascading errors may occur in the canon number values if the number pairs are not copied *as pairs*. For example, if Ammonian section numbers were copied first (in black ink) and then canon number values were added to the section numbers (in red ink), the copying of the sequence of canon number values may introduce a cascading error. As the analysis that follows will demonstrate, cascading errors occur with some frequency in the transmission of the Eusebian Apparatus in Alexandrinus.

### The Eusebian Apparatus in Matthew

Because of the sizable lacuna in the Gospel of Matthew, the Eusebian section numbers for the extant portion of this Gospel start at 269 (on V4.F2). In what remains of the Gospel, the Eusebian Apparatus is largely intact and its data values are fairly consistent with what is listed in NA<sup>27</sup> (see Table D.1). Regarding positioning and accuracy, of the 86 extant Ammonian sections in Matthew (85 of

---

<sup>82</sup> Smith, “Transmission Peculiarities of the Eusebian Apparatus in Codex Alexandrinus”; I had briefly introduced the cascading error in Alexandrinus in a paper the previous year (W. Andrew Smith, “Unit Delimitation in Codex Alexandrinus” [paper presented at the international meeting of the SBL, London, 6 July 6, 2011]). McFall had earlier referred to this error as a “knock-on effect” (279).

<sup>83</sup> Consider, for example, this list of values read from an exemplar: **Λ, Β, Η, Δ, Ε, Ζ, Ε, Λ, Β**. If the sequence these values represent an ordered list, then the omission of the fifth element in the list (**Ε**) results in a list where the sixth through ninth positions in the list contain incorrect values (**Λ, Β, Η, Δ, Ζ, Ε, Λ, Β, --**). Each *value* following the omitted value was transmitted correctly, but due to the omitted value was placed at the wrong position in the sequence.

which have accompanying canon number values), only 8 vary in position from what is found in NA<sup>27</sup> (9.3%) while 11 of the canon number values vary from NA<sup>27</sup> (12.94%). None of the positional variants differs by more than a (modern) verse. One section number (§355) was omitted (1.15%) and one section number (§345) has an omitted canon number value (1.16%).

In addition, there are two occurrences of variation in the sequences of canon numbers that appear to be the result of a cascading error—that is, the scribe appears to have treated the copying of the canon number values as a list when reproducing the Eusebian number pairs in this Gospel, and on two occasions a transmission error in the list resulted in a sequence of canon number values being incorrect before the sequence was restored to normalized values.

The first cascading error occurs in sections 296-298, where it appears that the canon number value from section 295 was mistakenly duplicated into section 296.

The sequence continues in error until it is corrected in section 299.<sup>84</sup>

Section	NA <sup>27</sup>		Codex A
295	1	→	1
296	2	→	1
297	4	→	2
298	6	→	4
299	4	→	4

A similar type of error occurs later in the Gospel (in §§345–348), where the 10, 2, 6, 1 pattern is likewise staggered, even though the canon number for section 345 is not duplicated:

---

<sup>84</sup> When I originally presented this material I simply displayed tabular data; following McFall's much better formatting idea (435), I have updated my tables with arrows to make the error mapping more explicit.



Section	NA <sup>27</sup>	Codex A
345	10	--
346	2	10
347	6	2
348	1	6
349	1	1

In sections 295–299, the duplication of a canon number causes the chain of errors to begin, but what ends it? That is, how is the scribe able to start matching canon numbers up correctly with Ammonian section numbers at section 299? As Figure 4.18 illustrates, the correction occurs at the end of a column/page. The canon number for section 298 is simply lost as the scribe begins correctly pairing numbers again at the page boundary.

In sections 345–348 the cascading error varies in the cause but not in the results. Section number 345 was written in the margin, but no canon table was assigned to it. Instead, the canon number for section 345 was written at section 346 and the error cascaded until the scribe realigned section and canon numbers at section 349. Figure 4.19 illustrates that once again the correction occurred at a page boundary; the error continues through section 348 on V4.F4b but then begins correctly in the first column of V4.F5a.

In his analysis of the Apparatus in Matthew, McFall makes no comment on the first cascading error (§§295–299), but he does note the second occurrence, observing:

At Mt §345 (Mt 27:51b-53) the scribe omitted to enter a canon number, but he then proceeded to put it under the following section (§346) and a knock-on effect occurs with the next two sections, up to §348, before the correct sequence is resumed. It is difficult to account for this mechanical error if his exemplar already had the Eusebian apparatus in the margin. The likely scenario is that an ancestor copy of Alexandrinus once had only the section numbers in the margin (much like the

exemplar of Codex E had). Later on, the canons were added beneath the section numbers and this is when the correct sequence was accidentally inserted incorrectly.<sup>85</sup>

As a result, McFall concludes that Alexandrinus “could be taken as an indirect witness to a stage when the canon numbers did not accompany the section numbers.”<sup>86</sup> McFall rightly recognizes that the cascading error would be very improbable if the Eusebian Apparatus were present in the exemplar of Alexandrinus, but the collective data for all four Gospels will suggest that the Ammonian sections were also not present in the exemplar. This issue will be addressed after the other Gospel data are analyzed.

In the other variations (ⲗ becomes 1 at 26:12 and ⲗ becomes ϥ at 27:39) no cause for this variation is immediately apparent. Only Eusebian number 296 varies both in position and in canon table number.

### The Eusebian Apparatus in Mark

The Eusebian number pairs in the Gospel of Mark are largely intact, though they end at 16:8 and do not continue into the “long ending” that follows. Of the 226 extant Ammonian sections in Mark’s Gospel, 21 of them vary in position from what is found in NA<sup>27</sup> (9.29%). Of those that vary in position, all but 5 vary by a modern verse or less. Those that vary more than a verse do so by 3 verses at most. Taking into account the positional shift of Eusebian section 232, only 3 Ammonian sections (§1, §177, and §233) were plainly omitted from the manuscript (1.31%);<sup>87</sup> overall, the scribe was fairly thorough in adding the Eusebian Apparatus, assuming a

---

<sup>85</sup> McFall, 279.

<sup>86</sup> Ibid.

<sup>87</sup> Because of damage to the UL corner of V4.F17a, it is possible that sections 185–186 were present, though displaced in position, in the manuscript. Section 185, though expected in V4.F16b.c2, may have been attracted to the paragraph break that occurs at the top of the following leaf.

complete list in the exemplar. Of the 225 extant and legible canon number values, 29 of them vary from the normalized values of NA<sup>27</sup> (12.89%).

Of the variations in canon number values, 26 of them differ from NA<sup>27</sup> (11.50%). In three instances the variations in canon number values appear to be caused by cascading error. A short series of errors occurs in sections 41-44, with two longer series in sections 175-182 and again in 214-223:

Section	NA <sup>27</sup>	Codex A
41	2	2
42	2	10
43	10	2
44	2	2
45	6	6

Section	NA <sup>27</sup>	Codex A
214	1	1
215	1	8
216	8	6
217	6	2
218	2	2
219	2	2
220	2	6
221	6	2
222	2	1
223	1	.

Section	NA <sup>27</sup>	Codex A
175	1	2
176	1	4
177	2	--
178	4	6
179	6	4
180	4	1
181	1	2
182	2	2

In the first cascading error (§§42–44), the scribe skipped over the canon number for section 42 and used the number for section 43. This propagated until section 44, where the same canon number had to be used twice (both at 43 and 44). The correction can be seen as happening at section 44, which happens to be at the end of a page (V4.F8a; see Figure 4.20); the Eusebian number pairs are correct on the following page (V4.F8b), which begins with section 45.

In the second cascading error (§§177–181), the number pair for section 177 is missing in Alexandrinus. Section 178 begins the second column of a page (V4.F16b; see Figure 4.21), and this is where the mistaken number pair mapping starts. The error cascades down to section 182, where a duplicate canon number puts the sequence back on track. Interestingly, the correction takes place somewhere other than page border. There is a great deal of space between section numbers on this leaf, which may have contributed to recognizing the error. However, the cascading error may begin even earlier in the sequence. Sections 175 and 176, which precede the missing section 177, may have been assigned the canon number values from sections 177 and 178; these two sections (175–176) occur at the bottom of the first column on this leaf, which may have contributed to the cascading error.

In the third cascading error (§§215–222; see Figure 4.22), the canon number of section 215 is skipped (possibly because it is the same as that of §214 or confusion because of the cluster of section at that point in the page), which sets off a cascading error that continues until section 223, where the manuscript is damaged. Section 222, which has the last extant canon number error, is at the end of a page (column two on V4.F17b; see Figure 4.5); while it is likely that this page boundary is where the cascading error ends, it is impossible to know for certain since the upper left corner of the next leaf and the following two section numbers are missing.

Though Ammonian sections from the Eusebian Apparatus are typically matched with sense unit boundaries (or drawn to them after the paragraphing has taken place), something unique occurs at Mark 12:25. Despite the lack of paragraphing at that point in the text, a Eusebian number pair is matched to that

location. So while sections may be attracted to unit breaks, they may also (rarely) be inserted independently of those breaks.

### The Eusebian Apparatus in Luke

In the Gospel of Luke, which signals a change from NT Scribe 1 to NT Scribe 2, the transmission errors in the Eusebian Apparatus are much more extensive than in the preceding two Gospels. The Ammonian sections are entirely lacking in Luke 9:1-43 and the percentage of variation from NA<sup>27</sup> rises significantly. Of the 317 extant and legible Ammonian sections in Luke's Gospel, 41 vary in position from what is found in NA<sup>27</sup> (12.93%) and 20 of the 342 possible positions are simply omitted by the scribe either by accident or because they were lacking from the exemplar (5.85%). Of the positional variations, 35 of them vary by a verse or less (85.37%). The greatest variations occur at the beginning of the Gospel, where Eusebian sections 2 and 3 have moved from Luke 1:35 and 1:36 to Luke 1:19 and 1:20; the drastic nature of this misplacement may be explained as an error of homoioarcton (both 1:35 and 1:19 begin with the phrase *καὶ ἀποκριθεὶς ὁ ἄγγελος εἶπεν* and both 1:36 and 1:20 begin with the phrase *καὶ ἰδοὺ*). Clustered variations are more common here than in Matthew and Mark. The largest cluster occurs when the wrong position of Eusebian section 278<sup>88</sup> shifts the next five positions, all of which increment by a verse. Of the 41 Ammonian sections that vary in position, all but 1 (number 278) are collocated with unit divisions of some kind; this does suggest that the section numbers may have been attracted to the unit divisions within the text.

---

<sup>88</sup> It is perhaps no coincidence that this Eusebian number has no corresponding line with spacing or *ekthesis*.

The canon table numbers show just as much variation as the positioning, with 46 of the 315 extant and legible numbers differing from what is recorded in NA<sup>27</sup> (14.60%). Of the canon number value errors, there is a single (or double) cascading error in this Gospel as well:

Section	NA <sup>27</sup>		Codex A
320	10		1
321	1	↗	2
322	2	↗	2
323	2	↗	1
324	1	↗	2
325	2	↗	2
326	10	→	10
327	2	→	2
328	1	→	1
329	1	↗	2
330	2	↗	10
331	10	↗	2
332	1	→	1

The first part of this error (§§320–324) involves the scribe omitting the canon number for section 320 and replacing it with the canon number for 321; the error continues until section 325 where the canon number from 324 is repeated. The first column of this page (V4.F40b) begins with section 319—compared to the previous two Gospels, it is unusual for a scribe to make an error this early on the page—and the cascaded errors terminate mid-column at section 325 (see Figure 4.23). Then the scribe is correct for three sections, followed by a convoluted sequence (2, 10, 2 instead of 1, 2, 10). The second part of this error (§§329–331) appears to be a short cascade of error though the canon number for section 331 is difficult to explain since the scribe tends to repeat a canon number when re-establishing the correct number pairings after an omitted canon number throws off the sequence.

Only one table number appears to be copied in error: at Luke 5:8, the Eusebian number is marked as **λλ/λ**. The table value of 30 is an obvious error and the **λ** may have merely been repeated from the Eusebian section number.

### The Eusebian Apparatus in John

In the Gospel of John the Eusebian Apparatus is largely complete, although the lacuna in chapters 6-8 eliminates a large portion of the data. Of the 194 extant and legible Ammonian sections found in the Gospel, 30 of them vary in position from what is found in NA<sup>27</sup> (15.46%) and only 3 of those numbers vary in position by more than a verse (10%). The largest variation in position is by 3 verses. Where the manuscript is intact, 6 of the possible 201 Ammonian sections were omitted entirely (2.99%). Overall, where positional variants cluster there does not appear to be a single principle at work (such as all of the positions coming earlier or later than expected).

Of the 193 extant and legible canon numbers, 32 of them vary from what is recorded in NA<sup>27</sup> (16.58%). One obvious case of cascading variation is found at the end of the Gospel:

Section	NA <sup>27</sup>		Codex A
226	10	→	10
227	9	↗	10
228	10	↗	9
229	9	↗	10
230	10	↗	9
231	9	↗	10
232	10	↗	--

This error occurs on the final leaf of John's Gospel (V4.F55b; see Figure 4.24). It is a difficult cascade to track with certainty since the sequence of canon number values

alternate between 10 and 9 until the end of the Gospel. However, it appears that the scribe missed the value of section 227 and instead continued the sequence of values with the canon number from section 228 until he ran out of section numbers.

Noteworthy is the absence of section 232 in this Gospel. Alternatively, if the scribe were copying canon numbers from a list, he may have seen that there were five remaining section numbers on the final page of John's Gospel (since §232 is missing) and then simply copied the final five values into those positions. However the cascading error occurred, the transfer from exemplar to Alexandrinus could not have been performed as a copying of number pairs or as an iterative process of copying a canon number from the exemplar's section number to the corresponding section number of Alexandrinus—otherwise the scribe would have had several chances to spot and fix the error.

### Summary

An examination of each of the Gospels in turn reveals that variation in the Eusebian Apparatus from what is recorded in NA<sup>27</sup> demonstrates two patterns: (1) NT Scribe 1 (copying the Gospels of Matthew and Mark) had a fairly constant rate of error in both variation of position and variation in table number values; and (2) NT Scribe 2 (copying the Gospels of Luke and John) progressively increased his error rate from one Gospel to the next—both in variation of position and variation in table numbers. In Table 4.9 that follows, these patterns are readily apparent:



**Table 4.9: Variants in the Apparatus of each Gospel**

	<b>Matthew (86 extant sections)</b>	<b>Mark (226 extant sections)</b>	<b>Luke (317 extant sections)</b>	<b>John (194 extant sections)</b>
<b>Variations in position</b>	8 (9.30%)	21 (9.29%)	41 (12.93%)	30 (15.46%)
<b>Variations in table numbers</b>	11 (12.94%)	29 (12.89%)	47 (14.92%)	32 (16.58%)
<b>Omitted Eusebian sections</b>	1 (1.15%)	5 (2.16%)	20 (5.93%)	6 (2.99%)

More intriguing is the pattern of cascading errors in canon table numbers that emerges in each of the Gospels when an error is introduced. As noted above, McFall posits that the scribe of Alexandrinus must have had only the Ammonian sections in his (primary) exemplar, using a second exemplar to copy the Eusebian canon numbers. In this scenario, the components of the Eusebian Apparatus were separated in whatever exemplars the scribes of Alexandrinus were using. The scribes were not copying number pairs, but were instead copying Ammonian section numbers from one source and canon numbers from a different source. This could explain why the chance of error is not independent for each number pair. This hypothesis is generally plausible, but perhaps not the most probable explanation when the high rate of positional errors of the Ammonian section numbers is taken into account.

Again, if the number pairs in the Eusebian Apparatus were recorded in pairs in the scribes' exemplar(s), and the numbers were copied *as pairs*, then this type of error should not occur; the transmission of each *pair* of numbers allows for self-correcting at each entry. This suggests that both scribes (NT Scribe 1 in

Matthew/Mark and NT Scribe 2 in Luke/John)<sup>89</sup> instead worked from some kind of list of canon number values that they then paired with Ammonian section numbers. When a canon number value was missed or duplicated from the list (unless the list itself was corrupted), the error cascaded for a few number pairs until the error was detected and corrected. While I am not suggesting that the canon numbers were *actually* copied from a separate list (as I will conclude below, I believe the Eusebian Apparatus was copied from a second exemplar), the cascading error is a result of *reading and copying* the canon number values as a list is read and copied.

Interestingly, at no time does the cascading error continue from one page to the next in Alexandrinus. In the two examples of cascading errors in Matthew, the third cascading error in Mark, and the single cascading error in John, the errors continue to the end of a page before being corrected (see Figures 4.18, 4.19, 4.22, and 4.24)—or at least ended in the case of John. In the first three cases, the beginning of a new page seemed to prompt the scribe to recheck the Eusebian Apparatus number pairings or—if working from a list canon numbers—the sequence of those canon numbers. In the cascading error in Luke and the second and third cascading errors in Mark (see Figures 4.23, 4.21, and 4.22), the beginning or end of a column seems to play a role in starting or ending a cascading error. Only the first (very short) cascading error in Mark appears to occur independently of any page or column boundaries.

In an effort to determine if the cascading error uncovered in Alexandrinus was unique, I performed a similar examination on six other Gospel manuscripts

---

<sup>89</sup> There is the possibility that a single scribe added the Apparatus to all four Gospels after the Gospel texts were copied. The palaeographical evidence, as well as the default formatting differences described above, indicates that both NT Scribe 1 and NT Scribe 2 were involved.

ranging in age and language.<sup>90</sup> Based on that small sample of manuscripts, I cautiously concluded that the cascading error was not unique to Alexandrinus, but the instances in Alexandrinus were more frequent and of longer sequence size than for other manuscripts. Errors in the Eusebian Apparatus of the other manuscripts tended *not* to cluster together, and when they did cluster together it was for very short sequences.

At the conclusion of that study, I noted that all of the cascading errors (and errors mimicking the cascading error) occurred near a page or column boundary and none of them crossed a page boundary; in some regard the boundary positions promote both the beginning and ending of cascading (and other) error sequences. While it is impossible to know for certain how the Eusebian Apparatus was reproduced in Alexandrinus, I believe the evidence points to two scribes transferring the Apparatus (both Ammonian sections and canon number values) from a separate exemplar into Alexandrinus either concomitantly or shortly after the Gospel texts had been copied. I support this conclusion based on the following evidence:

- (1) The data from Table 4.9 support a model in which the Ammonian sections were copied from a separate exemplar, primarily because of the high rate of placement error for the Ammonian sections, with a great variation in error by NT Scribe 2 (who appears to have become more careless as he moved into the Gospel of John). Copying the section numbers involved a longer search-and-transfer process (matching text to

---

<sup>90</sup> The findings of this study are found in W. Andrew Smith, "Transmission Peculiarities of the Eusebian Apparatus in Codex Alexandrinus"; the six manuscripts used for comparison were: Codex Sinaiticus (4th century; Greek), Codex Purpureus Petropolitanus (6th century; Greek), Codex Basiliensis (8th century; Greek), Minuscule 443 (12th century; Greek), Codex Caesareus Upsaliensis (c. AD 1050; Latin), and Codex Sangallensis 1395 (5th century; Latin). Of the six test manuscripts, only one evidenced a cascading error (Minuscule 443), and that error sequence was very short.

section start) than merely copying the canon number values, but one would expect a fairly constant rate of error if the section numbers were correctly placed in a single exemplar. Additionally, the unit delimitation analysis of Chapter 5 demonstrates that the high rate of section position errors is related to a need for the two scribes to “fit” the Ammonian section markers into a pre-existing paragraphing and chaptering structure in the Gospels of Alexandrinus. In other words, the Apparatus was added to Alexandrinus *after* the Gospel texts had been copied.

- (2) The Apparatus is the work of two hands. The constant rate of transmission error for the Apparatus in the Gospels of Matthew and Mark (copied by NT Scribe 1) and the higher, more variable rate of transmission error for the Apparatus in the Gospels of Luke and John (copied by NT Scribe 2) is consistent with the patterns for the two scribes regarding other paratextual features; NT Scribe 2, who seems to be more “free” with *mise-en-page* elements, was also more careless than NT Scribe 1 with regard to the Apparatus. More conclusively, the palaeographical analysis supports the work of two hands in reproducing the Apparatus in Alexandrinus.
- (3) The *atramentum* (black ink) of the section numbers appears to be a match for the ink used by the first hands. Since both the body of the Gospel texts and the section numbers were written using *atramentum*, the Ammonian section numbers may have been copied at the same time as the Gospels; again, however, the positional error rates suggest that the

sections were added from another exemplar *after* the body of the Gospel text was already in place.

- (4) The section numbers were written prior to the addition of the rubricated canon number values. Where the black ink of the section numbers did not provide enough room for the addition of the red ink canon number values, the scribe was either forced to write the red in over the black (e.g., §§46-47 in the Gospel of Mark) or leave off the red ornamental features altogether (e.g., §213 or §216 in the Gospel of Mark).
- (5) Subsequent to copying the section numbers into Alexandrinus, in a separate but single operation, the canon number values were added to the page in red ink. For that copying operation, if the scribe copying the canon number values were to read the values from the exemplar page *as a list of numbers* and then reproduce that list at the appropriate Ammonian sections on the copy page (Alexandrinus),<sup>91</sup> then the cascading error is accounted for while boundaries of columns and pages served as natural locations to begin or end list taking/reproduction.

While the scenario described above explains the evidence found in the manuscript, the question remains: Why do the cascading errors in Alexandrinus appear more frequently and of greater length than in the other manuscripts that were studied?

The simplest answer is haste or carelessness... [and] some carelessness in remembering the canon numbers being copied is not an unreasonable to postulate. Rather than meticulously copying a number at a time (which a more careful scribe might do), these scribes instead iteratively read a series of numbers from an

---

<sup>91</sup> Note that the four steps of copying (reading, remembering, repeating, and writing) are discussed in Alphonse Dain, *Les Manuscrits* (Paris: Les Belles lettres, 1964), 41–46. The scribe who attempts to retain too many numbers at a time, for example, can fail to reproduce a list of numbers at any of the final three stages.

exemplar list and duplicated or omitted numbers from the series while reproducing them.<sup>92</sup>

But how is it that *both* scribes manifest the cascading error? If they were both copying the Apparatus from a second exemplar, they were both engaged in the same task of first matching section numbers with appropriate text and then (after switching ink and pen) reading off canon number values to populate the appropriate section numbers. Because both engaged in the process of iteratively copying lists of canon number values, both risked committing (and actually committed) cascading errors. NT Scribe 2's higher rate of error is likely caused by his "freer" style of handling paratextual features.

---

<sup>92</sup> Excerpt from W. Andrew Smith, "Transmission Peculiarities of the Eusebian Apparatus in Codex Alexandrinus."

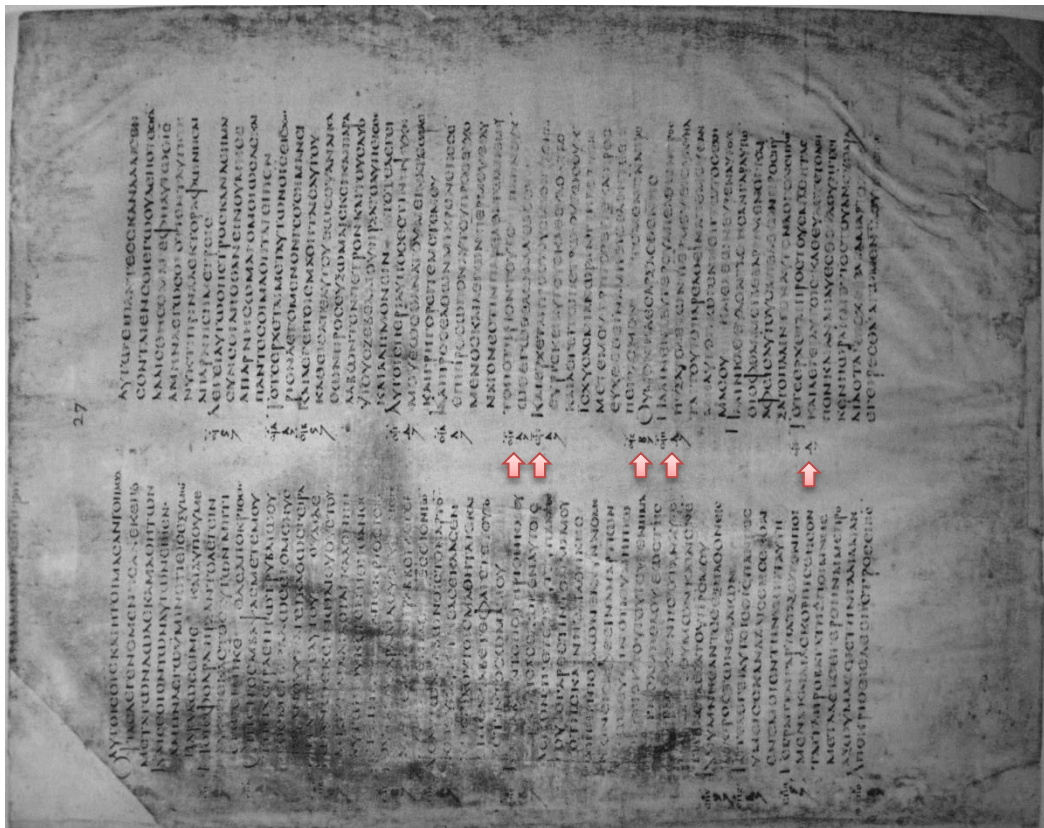


Figure 4.18: First cascading error in Matthew, sections 295–299 (highlighted with arrows)

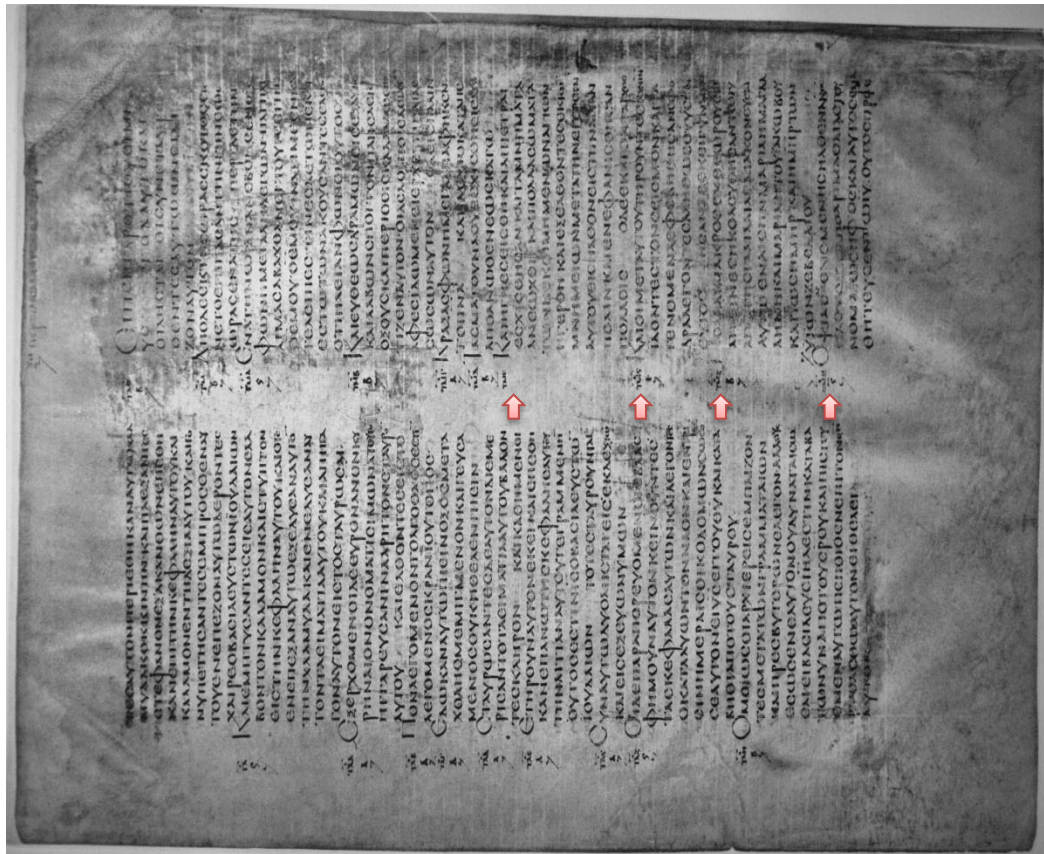


Figure 4.19: Second cascading error in Matthew, sections 345–348 (highlighted with arrows)



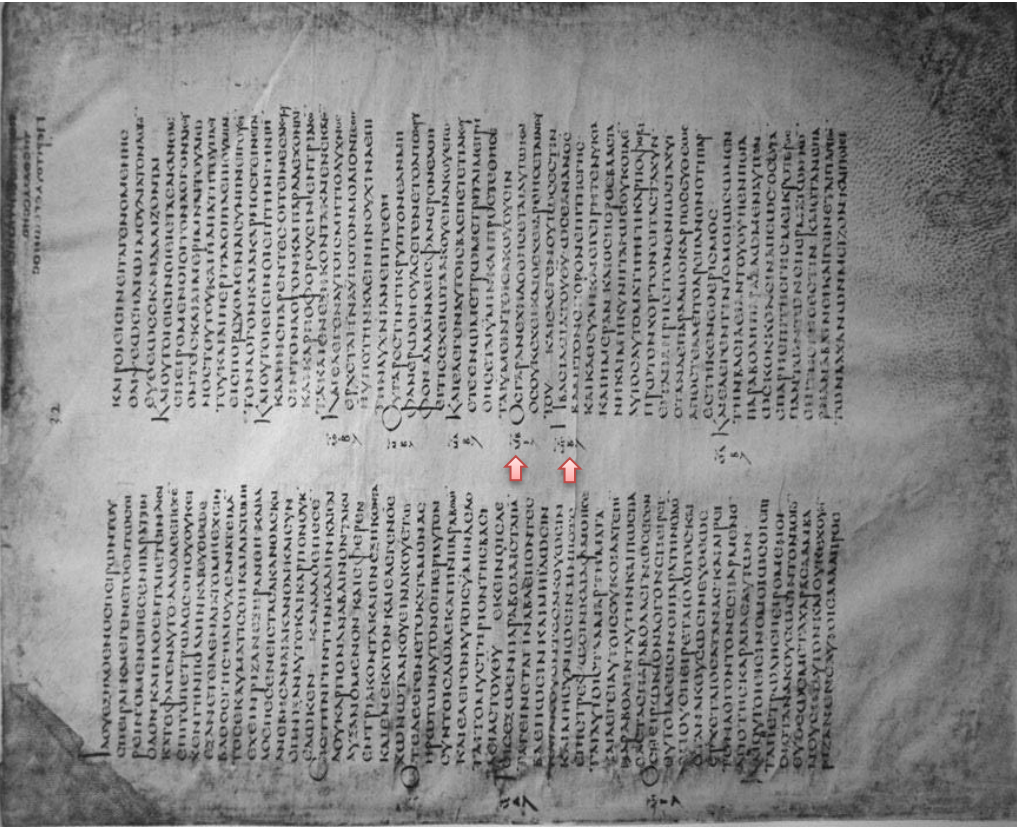


Figure 4.20: First cascading error in Mark, sections 42–43 (highlighted with arrows)

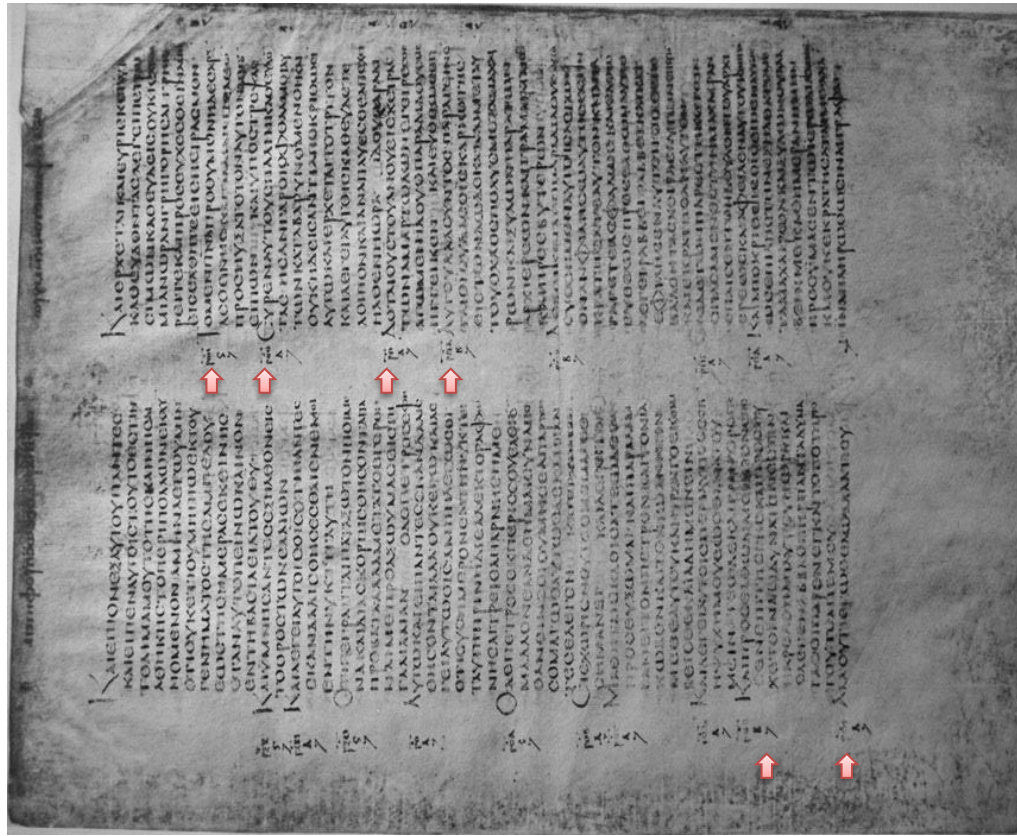


Figure 4.21: Second cascading error in Mark, sections 175–176 (first column) and 178–181 (second column)



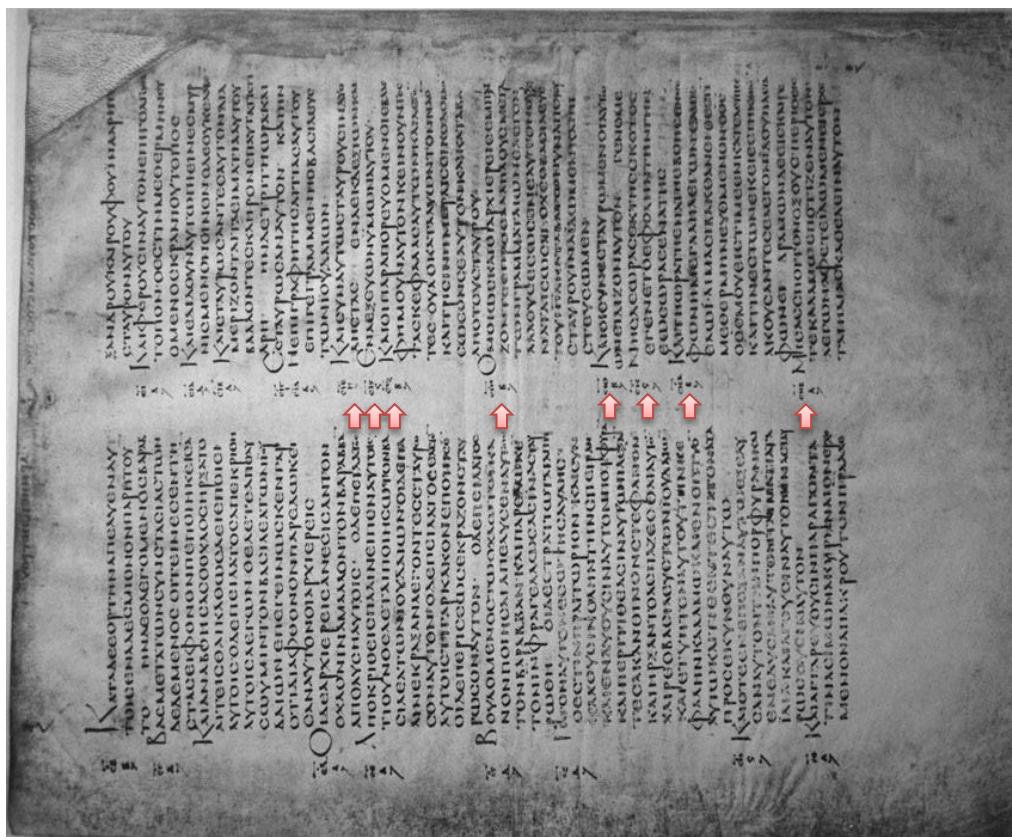


Figure 4.22: Third cascading error in Mark, sections 215–222 (highlighted with arrows)

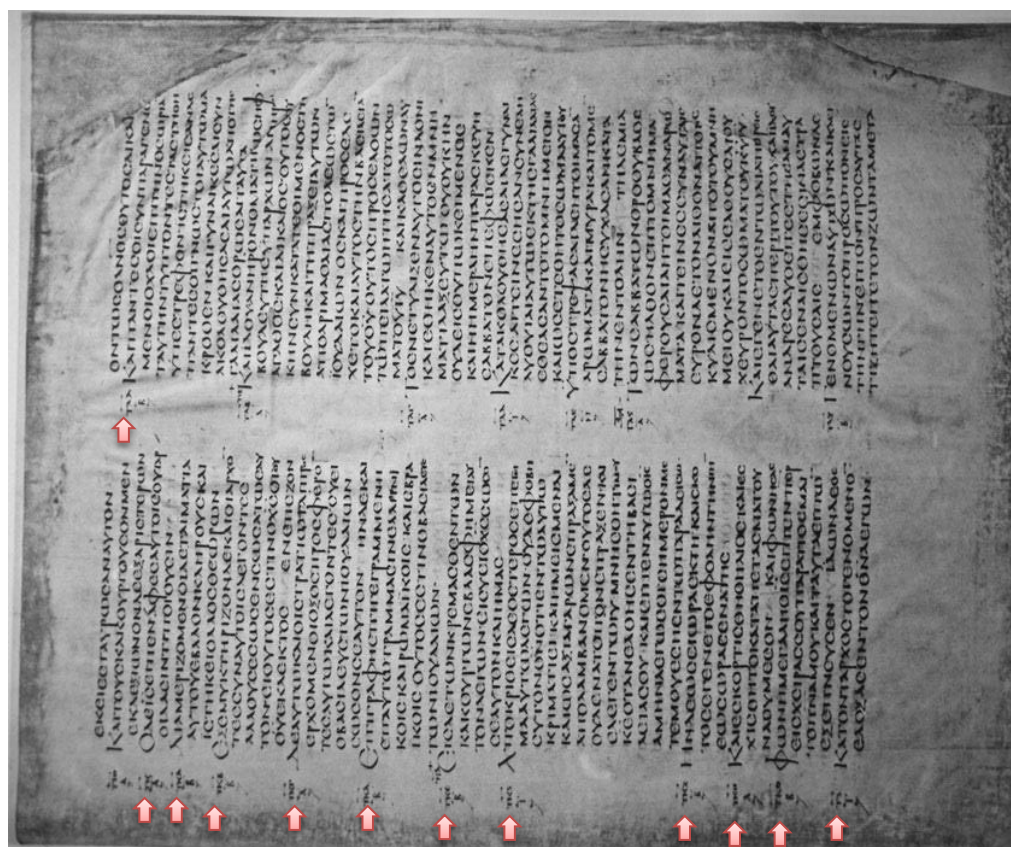


Figure 4.23: Cascading error in Luke, sections 320–331 (highlighted with arrows); note that the error occurs in two parts

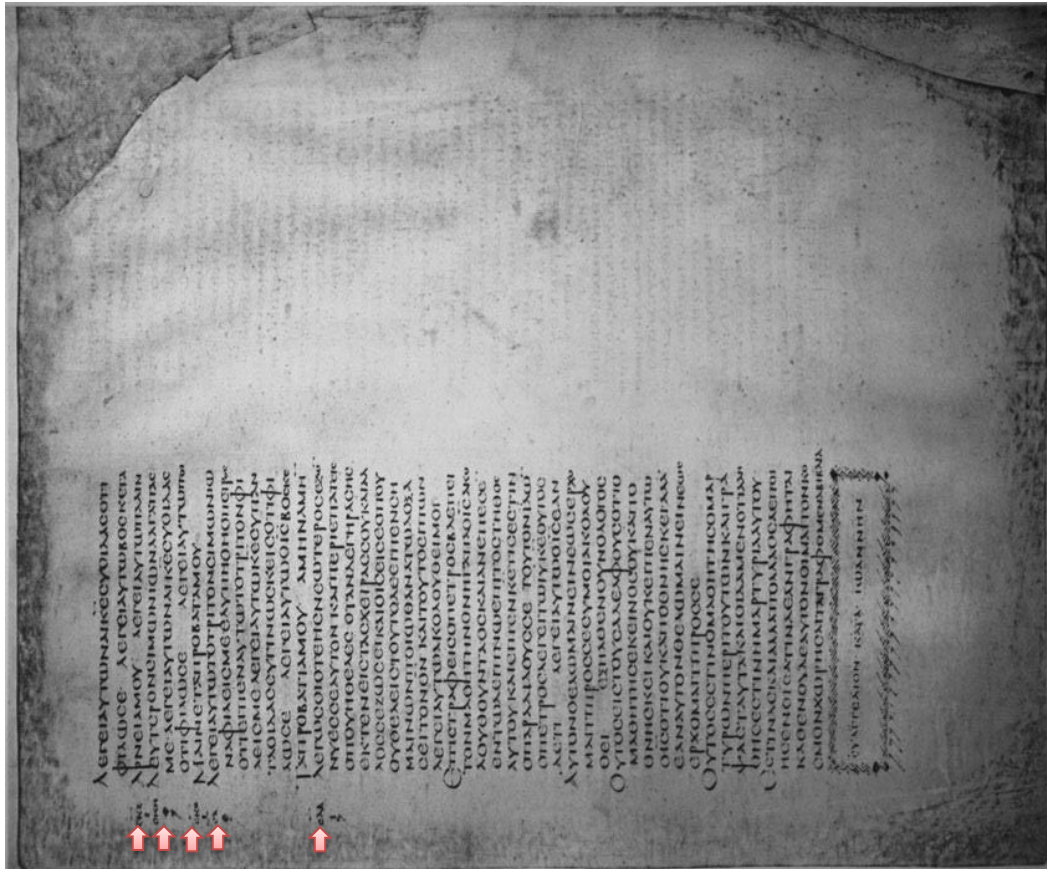


Figure 4.24: Cascading error in John, sections 227–231 (highlighted with arrows)

### *Kephalaia and Titloi*

In addition to being divided into pericopes according to the Eusebian Apparatus, Early Byzantine manuscripts of the Gospels are sometimes also divided according to chapter divisions; one such system is in place in each of the Gospels of Codex Alexandrinus. These chapter divisions or *kephalaia* (κεφάλαια) are accompanied by an index matching the *kephalaia* numbers with their descriptive titles or *titloi* (τίτλοι) at the preface to the Gospel text. Additionally, the chapters may be tracked in the text—as is done in Alexandrinus—by marking chapter numbers in the left margins (in Luke and John, but missing in Matthew and Mark) or by writing the titles in the

upper margins (the binders of Alexandrinus have unfortunately destroyed many of these).

Two systems of chapter division in the Gospels are found in the extant Greek manuscripts.<sup>93</sup> The first, which is the oldest system of chapter division in the NT texts, occurs in Codex Vaticanus. This is a system which is preserved in few other manuscripts,<sup>94</sup> including the Gospel of Luke in the sixth century Codex Zacynthius (Ξ; 040), in a thirteenth century minuscule of the Gospels (579), and possibly in other manuscripts.<sup>95</sup> These unit divisions are longer than the Ammonian sections, with 170 divisions in Matthew, 62 in Mark, 152 in Luke, and 50 in John.<sup>96</sup> But this system never gained widespread popularity.

The second, referred to by McArthur as “the Old Greek Divisions,” appears for the first time in Codex Alexandrinus<sup>97</sup> and became the standard in later Greek Gospel manuscripts.<sup>98</sup> This system’s use in Alexandrinus has received recent attention from Goswell, who examines how these chapter divisions function as early interpretation and implicit commentary on the text. Unlike the Alands, who describe the *kephalaia* as “essentially the pericope system of lectionary units”,<sup>99</sup> Goswell rightly believes that these irregularly spaced divisions (and their descriptive and

---

<sup>93</sup> McArthur notes that other systems appear in the versions (H. K. McArthur, “The Earliest Divisions of the Gospels,” in *SE Vol. 3,2* ed. F. L. Cross [Berlin: Akademie-Verlag, 1964], 267).

<sup>94</sup> Metzger and Ehrman, 34; Goswell, “Early Readers of the Gospels: The Kephalaia and Titloi of Codex Alexandrinus,” *JGRChJ* 6 (2009): 135.

<sup>95</sup> McArthur, “The Earliest Divisions of the Gospels,” 266.

<sup>96</sup> Parker, *New Testament Manuscripts*, 316; McArthur differs in this count, numbering 80 in John’s Gospel (“The Earliest Divisions of the Gospels,” 266).

<sup>97</sup> McArthur, “The Earliest Divisions of the Gospels,” 266. McArthur believes that this practice of division into *kephalaia* emerged in the second and third centuries and was adopted in biblical manuscripts in the third and fourth centuries, ultimately as a reference aid “used especially in academic circles” (272).

<sup>98</sup> Parker, *New Testament Manuscripts*, 316.

<sup>99</sup> Aland and Aland, 252. They go on to describe the use of *kephalaia* as “an early chapter system which is practically equivalent to the pericopes” (254). McArthur notes that “there are divisions which seem highly improbable as lections,” noting sections with only one or two verses (“The Earliest Divisions of the Gospels,” 268).

sometimes surprising titles) instead simply “represent scribal or editorial evaluation of what are the sense units.”<sup>100</sup> Though von Soden attributed the *kephalaia* to a pre-Eusebian interest in synoptic parallels,<sup>101</sup> McArthur convincingly argues that the placement of chapter divisions may be explained in other ways.<sup>102</sup>

Thompson described the system of capitulation in Alexandrinus as being integrated with the varied *paragraphus* markings:

The κεφάλαια are indicated in the margins of SS. Matthew and Mark by the sign 7 [on f. 14b (38b) a cross is used; but this is inserted by the rubricator]; in those of SS. Luke and John by crosses, with the addition of the numbers in red. These signs are also accompanied by a horizontal stroke, placed generally above the first large initial, or, more correctly, above the first letter—e.g. ff. 6b (30b), 9 (33), 12b (36b), 15 (39)—of the chapter, not infrequently in the first two Gospels, and more rarely in SS. Luke and John, ff. 22 (46), 28 (52), 41 (65), 43b (67b). An arrow-head is similarly used, f. 10 (34). When above the large initial, such marks are in red by the hand of the rubricator; when above the first letter, they are in black ink, by the first hand. The τίτλοι, or headings of chapters, were written in red in the upper margins, but the greater number have been mutilated or cut away.<sup>103</sup>

Thompson was correct regarding the chapter indicators (e.g., with regard to the horizontal stroke accompanying large initials), though the palaeographical analysis above demonstrates that the rubricator and the first hand were one and the same.<sup>104</sup> The rubricated titles in the upper margin of the Gospels share the same letter forms as the black text they are written above, and those letter forms change concomitantly with the change of hand at the beginning of the Gospel of Luke. So there is no question that the first hand was both aware of the capitulation and the

<sup>100</sup> Goswell, “Early Readers of the Gospels”, 137.

<sup>101</sup> Hermann Freiherr von Soden, *Die Schriften des Neuen Testaments*, vol. 1 (Berlin: Alexander Duncker, 1902), 430. Thus, he inquires: *Sollten die Titel darum für die parallelen κεφ gleichlautend sein, weil so ursprünglich die aus den verschiedenen Evv synoptisch verbundenen κεφαλαια überschrieben waren?*

<sup>102</sup> McArthur, “The Earliest Divisions of the Gospels,” 271. For example, “new divisions occur most frequently at the beginning of a miracle story, at the beginning of a parable, and at the beginning of a major speech by Jesus.”

<sup>103</sup> *Facsimile*, 4:4; Thompson’s footnoted comment is included in square brackets.

<sup>104</sup> Thompson was aware of the change in paratextual features that took place where the first hand was known to change; even if he assumed that the rubricator and first hand were not the same, they would at the very least have to have worked in scribe-and-rubricator pairs.

implementer of the notation. As the unit delimitation section in Chapter 5 will reveal, there is a very strong correlation between unit divisions marked by *ekthesis* (with or without spacing) and chapter divisions; the chapter divisions are a subset of the major unit divisions in each of the Gospels.

### Chapter Divisions in the Gospel of Matthew

Regrettably, if there was a chapter index preceding the Gospel of Matthew, it was lost with the beginning of the book. Chapter division numbers do not appear in the margins of the text itself, but some titles are retained in the upper margin of the text despite the brutal trimming the manuscript endured by one of its binders. Each of the titles in the upper margin is in the format of a chapter number (with a supralinear mark and a 7-shaped *paragraphus* mark below) followed by the chapter *titlos*. What little has survived is recorded in Table 4.10.

**Table 4.10: Marginal chapter notations in Matthew**

No.	Page <sup>105</sup>	Col.	<i>Titlos</i> in A
[64]	V4.F3a, 27a	1	[ΠΕΡΙ ΤΟΥ ΜΥΣΤΙΚ[ΟΥ ΔΕΙΠΝΟΥ]
65	V4.F3b, 27b	1	ΠΕΡΙ ΤΗΣ [ΠΑ]ΡΑΔΟΣΕΩΣ ΤΟΥ ΙΥ
66	V4.F3b, 27b	2	ΠΕΡΙ ΤΗΣ ΑΡΗΣΕΩ[Σ ΤΟΥ ΠΕΤΡΟΥ]
[67]	V4.F4a, 28a	1	[ΠΕΡΙ ΤΗΣ] ΤΟΥ ΙΟΥΔΑ ΜΕΤΑΜΕΛΕΙΑΣ
68	V4.F4b, 28b	2	ΠΕΡΙ ΤΗΣ ΛΙΤΗΣΕΩΣ [Τ]ΟΥ Σ[ΩΜΑΤΟΣ ΤΟΥ ΚΥ]

For the purpose of examining unit delimitation, these data are not particularly useful. This small remnant of the Old Greek titles from Matthew does, however, confirm the antiquity of a portion of the Old Greek titles found in later manuscripts.

<sup>105</sup> Page numbers are given in absolute values, followed by Young's page numbering (with the suffix "a" and "b" representing right-facing page and left-facing page, respectively).



### Chapter Divisions in the Gospel of Mark

Preceding the Gospel of Mark is a chapter index titled **ΤΟΥ ΚΑΤΑ ΜΑΡΚΟΝ ΕΥΑΓΓΕΛΙΟΥ ΛΙ ΠΕΡΙΟΧΛΙ** (“The Sections of the Gospel of Mark”).

Immediately following the final verses and *coronis* of Matthew’s Gospel, the index appears to be coeval with the original copying of the manuscript. Each chapter number in the index has a supralinear mark. Within the chapter index at the beginning of Mark’s Gospel chapter numbers that have a *titlos* occupying a single row have no *paragraphus* beneath them, while those with longer (greater than one row) *titloi* or occurring at the end of a column have the *paragraphus* mark beneath them (see chapters 10, 18, 24, 29, 35, 37, and the exaggerated *paragraphus* following chapter 48). The index lists 48 numbered *kephalaia* in Mark:

**Table 4.11: Chapter divisions in Mark**

No.	Gospel Reference	<i>Titlos</i> in A
1	1:23	ΠΕΡΙ ΤΟΥ ΔΑΙΜΟΝΙΖΟΜΕΝΟΥ
2	1:29	ΠΕΡΙ ΤΗΣ ΠΕΝΘΕΡΑΣ ΠΕΤΡΟΥ
3	1:32	ΠΕΡΙ ΤΩΝ ΙΑΘΕΝΤΩΝ ΑΠΟ ΠΟΙΚΙΛΩΝ ΝΟΣΩΝ
4	1:40	ΠΕΡΙ ΤΟΥ ΛΕΠΡΟΥ
5	2:3	ΠΕΡΙ ΤΟΥ ΠΑΡΑΛΥΤΙΚΟΥ
6	2:14	ΠΕΡΙ ΛΕΥΙ ΤΟΥ ΤΕΛΩΝΟΥ
7	3:1	ΠΕΡΙ ΤΟΥ ΞΗΡΑΝ ΕΧΟΝΤΟΣ ΧΕΙΡΑ
8	3:13	ΠΕΡΙ ΤΗΣ ΤΩΝ ΑΠΟΣΤΟΛΩΝ ΕΚΛΟΓΗΣ
9	4:3b	ΠΕΡΙ ΤΗΣ ΠΑΡΑΒΟΛΗΣ ΤΟΥ ΣΠΟΡΟΥ
10	4:35	ΠΕΡΙ ΤΗΣ ΕΠΙΤΙΜΗΣΕΩΣ ΤΟΥ ΑΝΕΜΟΥ ΚΑΙ ΤΗΣ ΘΑΛΑΣΣΗΣ
11	5:2	ΠΕΡΙ ΤΟΥ ΛΕΓΕΩΝΟΣ
12	5:22	ΠΕΡΙ ΤΗΣ ΘΥΓΑΤΡΟΣ ΤΟΥ ΑΡΧΙΣΥΝΑΓΩΓΟΥ
13	5:25	ΠΕΡΙ ΤΗΣ ΑΙΜΟΡΡΟΥΣΗΣ
14	6:6b	ΠΕΡΙ ΤΗΣ ΔΙΑΤΑΓΗΣ ΤΩΝ ΑΠΟΣΤΟΛΩΝ
15	6:14	ΠΕΡΙ ΙΩΑΝΝΟΥ ΚΑΙ ΗΡΩΔΟΥ
16	6:34	ΠΕΡΙ ΤΩΝ ΠΕΝΤΕ ΑΡΤΩΝ
17	6:47	ΠΕΡΙ ΤΟΥ ΕΝ ΘΑΛΑΣΣΗ ΠΕΡΙΠΑΤΟΥ
18	7:5	ΠΕΡΙ ΤΗΣ ΠΑΡΑΒΑΣΕΩΣ ΤΗΣ ΕΝΤΟΛΗΣ ΤΟΥ ΘΥ
19	7:24	ΠΕΡΙ ΤΗΣ ΦΟΙΝΙΚΙΣΣΗΣ
20	7:31	ΠΕΡΙ ΤΟΥ ΜΟΓΙΣΤΟΥ
21	8:1	ΠΕΡΙ ΤΩΝ ΕΠΤΑ ΑΡΤΩΝ
22	8:15	ΠΕΡΙ ΤΗΣ ΖΥΜΗΣ ΤΩΝ ΦΑΡΙΣΑΙΩΝ

No.	Gospel Reference	Titlos in A
23	8:22	ΠΕΡΙ ΤΟΥ ΤΥΦΛΟΥ
24	8:27	ΠΕΡΙ ΤΗΣ ΕΝ ΚΑΙΣΑΡΙΑ ΕΠΕΡΩΤΗΣΕΩΣ
25	9:2	ΠΕΡΙ ΤΗΣ ΜΕΤΑΜΟΡΦΩΣΕΩΣ ΤΟΥ ΙΥ
26	9:17	ΠΕΡΙ ΤΟΥ ΣΕΛΗΝΙΑΖΟΜΕΝΟΥ
27	9:33	ΠΕΡΙ ΤΩΝ ΔΙΑΛΟΓΙΖΟΜΕΝΩΝ ΤΙΣ ΜΕΙΖΩΝ
28	10:1	ΠΕΡΙ ΤΩΝ ΕΠΕΡΩΤΗΣΑΝΤΩΝ ΦΑΡΙΣΑΙΩΝ
29	10:17	ΠΕΡΙ ΤΟΥ ΕΠΕΡΩΤΗΣΑΝΤΟΣ ΑΥΤΟΝ ΠΛΟΥΣΙΟΥ
30	10:35	ΠΕΡΙ ΤΩΝ ΨΥΩΝ ΖΕΒΕΔΑΙΟΥ
31	10:46	ΠΕΡΙ ΒΛΑΤΤΙΜΑΙΟΥ
32	11:1	ΠΕΡΙ ΤΟΥ ΠΩΛΟΥ
33	11:12	ΠΕΡΙ ΤΗΣ ΞΗΡΑΝΘΕΙΣΗΣ ΣΥΚΗΣ
34	11:22	ΠΕΡΙ ΑΜΗΝΕΙΚΑΚΙΑΣ
35	11:27	ΠΕΡΙ ΤΩΝ ΕΠΕΡΩΤΗΣΑΝΤΩΝ ΤΟΝ ΚΝ ΑΡΧΙΕΡΕΩΝ ΚΑΙ ΓΡΑΜΜΑΤΑΙΩΝ· ΕΝ ΠΟΙΑ ΕΞΟΥΣΙΑ ΤΑΥΤΑ ΠΟΙΕΙΣ
36	12:1	ΠΕΡΙ ΤΟΥ ΑΜΠΕΛΩΝΟΣ
37	12:13	ΠΕΡΙ ΤΩΝ ΕΓΚΛΗΤΩΝ ΔΙΑ ΤΟΝ ΚΗΝΣΟΝ
38	12:18	ΠΕΡΙ ΤΩΝ ΣΑΔΔΟΥΚΑΙΩΝ
39	12:28	ΠΕΡΙ ΤΩΝ ΓΡΑΜΜΑΤΑΙΩΝ
40	12:35	ΠΕΡΙ ΤΗΣ ΤΟΥ ΚΥ ΕΠΕΡΩΤΗΣΕΩΣ
41	12:41	ΠΕΡΙ ΤΗΣ ΤΑ ΔΥΟ ΛΕΠΤΑ
42	13:3	ΠΕΡΙ ΤΗΣ ΣΥΝΤΕΛΕΙΑΣ
43	13:32	ΠΕΡΙ ΤΗΣ ΗΜΕΡΑΣ ΚΑΙ ΩΡΑΣ
44	14:3	ΠΕΡΙ ΤΗΣ ΑΛΙΨΗΣ ΤΟΝ ΚΝ ΜΥΡΩ
45	14:12	ΠΕΡΙ ΤΟΥ ΠΑΣΧΑ
46	14:17	ΠΕΡΙ ΠΑΡΑΔΟΣΕΩΣ ΠΡΟΦΗΤΕΙΑ
47	14:66	ΑΡΝΗΣΙΣ ΠΕΤΡΟΥ
48	15:42	ΠΕΡΙ ΤΗΣ ΛΙΤΗΣΕΩΣ ΤΟΥ ΚΥΡΙΑΚΟΥ ΣΩΜΑΤΟΣ

Unlike the Gospels of Luke and John, the numbers for these chapter divisions do not appear in the margins to the left of each column of text; instead, the chapter number and *titloi* appear at the top of the page where the top has survived the binder's shearing. Table 4.12 lists the marginal *titloi* that remain.

Table 4.12: Marginal chapter notations in Mark

No.	Page <sup>106</sup>	Col.	Titlos in A
1	--	1	-- <sup>107</sup>
2	V4.F6a, 30a	2	περι της πενθερας πετρου
4	V4.F6b, 30b	1	περι του λεπρου
5	V4.F6b, 30b	2	περι του παραλυτικου
8	V4.F7b, 31b	1	περι [...] <sup>108</sup>
10 11	V4.F8b, 32b	1	περι της επιτιμησεως του ανεμου και της θαλασσης περι του λεγεωνος
[12] [13]	V4.F9a, 33a	1	[περι] της θυγατρος του αρχισυναγωγ[ου] [πε]ρι της αιμορροουσης
14 15	V4.F9b, 33b	1	περι της διαταγης των αποστολων περι ιωαννου και ηρωδου
[16]	V4.F10a, 34a	1	[περι] των πεντε αρτων και των β̄ ιχθυων
17	V4.F10a, 34a	2	περι του εν θαλασση περιπατου
18	V4.F10b, 34b	1	περι της παραβασεως της εντολης του θ̄υ
[19] [20]	V4.F11a, 35a	1	[περι] της φοινικισσης [περι] του μογυλλου
21	V4.F11a, 35a	2	[πε]ρι των [ε]πτα αρτων
22 23 24	V4.F11b 35b	1	περι της ζυμης των φαρισαιων περι του τυφλου περι της εν κλιςαιρα επερωτησεως
25	V4.F11b 35b	2	π[ε]ρι της μεταμορφεωσεω[ς] του ῑυ
27	V4.F12b 36b	1	περι των διαλογιζομενων τις μειζων
28	V4.F12b 36b14	2	περι των επερωτησαντων φαρισαιων]
29	V4.F13a, 37a	1	[περι] του επερωτησαντος αυτον πλουσιου
30	V4.F13b, 37b	1	περι των υιων zebedaiou
31 32	V4.F13b, 37b	2	περι βαλτιμαiou περι του πωλου

<sup>106</sup> Page numbers are given in absolute values, followed by Young's page numbering (with the suffix "a" and "b" representing right-facing page and left-facing page, respectively).

<sup>107</sup> The *titlos* does not appear here; rather, the title of the book is visible instead ([...]ΙΟΝ ΚΑΤΑ ΜΑΡΚΟΝ).

<sup>108</sup> Woide recorded as much as περι της.



No.	Page <sup>106</sup>	Col.	Titlos in A
[33]	V4.F14a, 38a	1	[ΠΕΡΙ ΤΗΣ] ΖΗΡΑΝΘΕΙΣΗΣ ΣΥΚΗΣ
34 35	V4.F14a, 38a	2	ΠΕΡΙ ΑΜΝΗΣΙΚΑΚΙΑΣ ΠΕΡΙ ΤΩΝ ΕΠΕΡΩΤΗΣΑΝΤΩΝ ΤΟΝ ΚΝ ΕΝ ΠΟΙΑ ΕΞΟΥΣΙΑ ΤΑΥΤΑ ΠΟΙΕΙΣ
36 37	V4.F14b, 38b	1	ΠΕΡΙ ΤΟΥ ΑΜΠΕΛΩΝΟΣ ΠΕΡΙ ΤΩΝ ΕΠΕΡΩΤΗΣΑΝΤΩΝ ΔΙΑ ΤΟΝ ΚΗΝΣΟ
38	V4.F14b, 38b	2	ΠΕΡΙ ΤΩΝ ΣΑΔΔΟΥΚΑΙΩΝ
[39] [40]	V4.F15a, 39a	1	[ΠΕΡΙ ΤΩΝ] ΓΡΑΜΜΑΤΑΙΩΝ [ΠΕΡΙ] ΤΗΣ ΤΟΥ ΚΥ ΕΠΕΡΩΤΗΣΕΩΣ
41 42	V4.F15a, 39a	2	ΠΕΡΙ ΤΗΣ ΤΑ ΔΥΟ ΛΕΠΤΑ ΠΕΡΙ ΤΗΣ ΣΥΝΤΕΛΕΙΑΣ
43	V4.F15b, 39b	2	ΠΕΡΙ ΤΗΣ ΗΜΕΡΑΣ ΚΑΙ ΩΡΑΣ
[44]	V4.F16a, 40a	1	[ΠΕΡΙ ΤΗΣ] ΑΛΙΨΑΣΗΣ ΤΟΝ ΚΝ ΜΥΡΩ
45 46	V4.F16a, 40a	2	[ΠΕ]ΡΙ ΤΟΥ ΠΙΛΑΤΟΥ ΠΕΡΙ ΠΑΡΑΔΟΣΕΩΣ ΠΡΟΦΗΤΕΙΑ
47	V4.F17a, 41a	2	ΑΡΗΣΙΣ ΠΕΤΡΟΥ
[48]	n/a	1	[ΠΕΡΙ ΤΗΣ ΑΙΤΗΣ]ΕΩΣ ΤΟΥ ΣΩΜΑΤΟΣ

The title texts that appear in the upper margin of the manuscript do not represent a strict transfer from the book's index to the associated page. Comparing the two, the title text of chapter 16 is expanded from what is found in the index, the title text of chapter 35 is contracted, and the title text of chapter 37 altered (in its first half).

Though the chapter 48 heading has been sheared off of page V4.F18a of the manuscript, a reversed impression of the *titlos* (apparently modified from what is found in the index) is visible on the preceding page (V4.F17b). This ink transfer represents an unintentional record of the missing *titlos*, marking the facing page at some time that pre-dates the final shearing of the manuscript's pages.

## Chapter Divisions in the Gospel of Luke

Preceding the text of Luke's Gospel there is an index page, with writing on both sides of the leaf, recording the book's chapter numbers and titles. The index is not preceded by a title, but does conclude with a *coronis* reading: **ΤΟΥ ΚΑΤΑ ΛΟΥΚΑΝ ΕΥΑΓΓΕΛΙΟΥ ΤΑ ΚΕΦΑΛΑΙΑ** ("The Chapters of the Gospel According to Luke"). There are 83 numbered *kephalaia* in Luke:

Table 4.13: Chapter divisions in Luke

No.	Gospel Reference	Titlos in A
[1]	2:1	ΠΕΡΙ ΤΗΣ ΑΠΟΓΡΑΦΗΣ
[2]	2:8	ΠΕΡΙ ΤΩΝ ΑΓΡΑΥΛΟΥΝΤΩΝ ΠΟΙΜΑΙΝΩΝ
[3]	2:25	ΠΕΡΙ ΣΥΜΕΩΝ
[4]	2:36	ΠΕΡΙ ΑΝΝΑΣ ΤΗΣ ΠΡΟΦΗΤΕΙΔΟΣ
5	3:1	ΠΕΡΙ ΤΟΥ ΓΕΝΟΜΕΝΟΥ ΡΗΜΑΤΟΣ ΠΡΟΣ ΙΩΑΝΝΗΝ
6	3:14 <sup>109</sup>	ΠΕΡΙ ΤΩΝ ΕΠΕΡΩΤΗΣΑΝΤΩΝ ΤΟΝ ΙΩΑΝΝΗΝ
7	4:1	ΠΕΡΙ ΤΟΥ ΠΕΙΡΑΣΜΟΥ ΤΟΥ ΣΡΣ
8	4:33	ΠΕΡΙ ΤΟΥ ΕΧΟΝΤΟΣ ΠΝΕΥΜΑ ΔΑΙΜΟΝΙΟΥ
9	4:38	ΠΕΡΙ ΤΗΣ ΠΕΝΘΕΡΑΣ ΠΕΤΡΟΥ
10	4:40 <sup>110</sup>	ΠΕΡΙ ΤΩΝ ΙΛΘΕΝΤΩΝ ΑΠΟ ΠΟΙΚΙΛΩΝ ΝΟΣΩΝ
11	-- <sup>111</sup>	ΠΕΡΙ ΤΗΣ ΑΓΡΑΣ ΤΩΝ ΙΧΘΥΩΝ
12	5:12	ΠΕΡΙ ΤΟΥ ΛΕΠΡΟΥΣ
13	5:18 <sup>112</sup>	ΠΕΡΙ ΤΟΥ ΠΑΡΑΛΥΤΙΚΟΥ
14	5:27	ΠΕΡΙ ΛΕΥΙ ΤΟΥ ΤΕΛΩΝΟΥ
15	6:6	ΠΕΡΙ ΤΟΥ ΞΗΡΑΝ ΕΧΟΝΤΟΣ ΧΕΙΡΑ
16	6:13	ΠΕΡΙ ΤΗΣ ΤΩΝ ΑΠΟΣΤΟΛΩΝ ΕΚΛΟΓΗΣ
17	6:20b	ΠΕΡΙ ΤΩΝ ΜΑΚΑΡΙΣΜΩΝ
18	7:2	ΠΕΡΙ ΤΟΥ ΕΚΑΤΟΝΤΑΡΧΟΥ
19	7:11	ΠΕΡΙ ΤΟΥ ΥΙΟΥ ΤΗΣ ΧΗΡΑΣ
20	7:18	ΠΕΡΙ ΤΩΝ ΑΠΟΣΤΑΛΛΕΝΤΩΝ ΥΠΟ ΙΩΑΝΝΟΥ
21	7:37	ΠΕΡΙ ΤΗΣ ΑΛΙΨΑΧΗΣ ΤΟΝ ΚΝ ΜΥΡΩ
22	8:4	ΠΕΡΙ ΤΗΣ ΠΑΡΑΒΟΛΗΣ ΤΟΥ ΣΠΕΙΡΟΝΤΟΣ
23	8:22	ΠΕΡΙ ΤΗΣ ΕΠΙΤΙΜΗΣΕΩΣ ΤΩΝ ΨΑΛΤΩΝ

<sup>109</sup> Goswell places this division at 3:15 and comments that NA<sup>27</sup> and von Soden marked it at 3:10 "but the *titlos* is at the top of the first column on p. 46 verso" ("Early Readers of the Gospels", 161). Regardless, the mark rather appears to coincide with 3:14.

<sup>110</sup> Repeated at 5:1.

<sup>111</sup> The chapter number at 5:1 is a repeat of 1 (occurring first at 4:40) instead of 1A; Goswell makes no note of this, instead placing chapter 11 at Luke 5:1 and commenting that NA<sup>27</sup> and von Soden "indicate 5.4 where there is another paragraph division" ("Early Readers of the Gospels", 161).

<sup>112</sup> Goswell records this division at 5:17 despite NA<sup>27</sup> and von Soden listing it at 5:18 ("Early Readers of the Gospels", 161).

No.	Gospel Reference	Titlos in A
24	8:26	ΠΕΡΙ ΤΟΥ ΛΕΓΕΩΝΟΣ
25	8:41	ΠΕΡΙ ΤΗΣ ΘΥΓΑΤΡΟΣ ΤΟΥ ΑΡΧΙΣΥΝΑΓΩΓΟΥ
26	8:43	ΠΕΡΙ ΤΗΣ ΛΙΜΟΡΡΟΟΥΣΗΣ
27	9:7 <sup>113</sup>	ΠΕΡΙ ΤΗΣ ΑΠΟΣΤΟΛΗΣ ΤΩΝ ΔΩΔΕΚΑ
28	9:12	ΠΕΡΙ ΤΩΝ ΠΕΝΤΕ ΑΡΤΩΝ ΚΑΙ ΤΩΝ ΔΥΟ ΪΧΘΥΩΝ
29	9:18	ΠΕΡΙ ΤΗΣ ΤΩΝ ΜΑΘΗΤΩΝ ΕΠΕΡΩΤΗΣΕΩΣ
30	9:28	ΠΕΡΙ ΤΗΣ ΜΕΤΑΜΟΡΦΩΣΕΩΣ ΤΟΥ ΙΥ
31	9:37	ΠΕΡΙ ΤΟΥ ΣΕΛΗΝΙΑΖΟΜΕΝΟΥ
32	9:46	ΠΕΡΙ ΤΩΝ ΔΙΑΛΟΓΙΖΟΜΕΝΩΝ ΤΙΣ ΜΕΙΖΩΝ
33	9:57	ΠΕΡΙ ΤΟΥ ΜΗ ΕΠΙΤΡΕΠΟΜΕΝΟΥ ΑΚΟΛΟΥΘΕΙΝ
34	10:1	ΠΕΡΙ ΤΩΝ ΑΝΑΔΕΙΧΘΕΝΤΩΝ ΕΒΔΟΜΗΚΟΝΤΑ
35	10:25	ΠΕΡΙ ΤΟΥ ΕΠΕΡΩΤΗΣΑΝΤΟΣ ΝΟΜΙΚΟΥ
36	10:30 <sup>114</sup>	ΠΕΡΙ ΜΑΡΘΑΣ ΚΑΙ ΜΑΡΙΑΣ
37	10:38	ΠΕΡΙ ΠΡΟΣΕΥΧΗΣ
38	11:1	ΠΕΡΙ ΤΟΥ ΕΧΟΝΤΟΣ ΔΑΙΜΟΝΙΟΝ ΚΩΦΟΝ
39	11:27 <sup>115</sup>	ΠΕΡΙ ΤΟΥ ΕΜΠΑΙΣΟΝΤΟΣ ΕΙΣ ΤΟΥΣ ΛΗΣΤΑΣ
40	11:29 <sup>116</sup>	ΠΕΡΙ ΤΗΣ ΕΚ ΤΟΥ ΟΧΛΟΥ ΕΠΑΡΑΣΗΣ ΦΩΝΗΝ
41	--	ΠΕΡΙ ΤΩΝ ΛΙΤΟΥΝΤΩΝ ΣΗΜΕΙΟΝ
42	11:37	ΠΕΡΙ ΤΟΥ ΦΑΡΙΣΑΙΟΥ ΤΟΥ ΚΑΛΕΣΑΝΤΟΣ ΤΟΝ ΙΝ
43	11:46	ΠΕΡΙ ΤΟΥ ΤΑΛΛΗΝΙΣΜΟΥ ΤΩΝ ΝΟΜΙΚΩΝ
44	12:1b	ΠΕΡΙ ΤΗΣ ΖΥΜΗΣ ΤΩΝ ΦΑΡΙΣΑΙΩΝ
45	12:13	ΠΕΡΙ ΤΟΥ ΘΕΛΟΝΤΟΣ ΜΕΡΙΣΤΕΙΝ ΤΗΝ ΟΥΣΙΑΝ
46	12:16	ΠΕΡΙ ΟΥ ΗΥΦΟΡΗΣΕΝ Η ΧΩΡΑ ΠΛΟΥΣΙΟΥ
47	-- <sup>117</sup>	ΠΕΡΙ ΤΩΝ ΓΑΛΙΛΑΙΩΝ ΚΑΙ ΤΩΝ ΕΝ ΤΩ ΣΙΧΩΛΜ
48	-- <sup>118</sup>	ΠΕΡΙ ΤΗΣ ΕΧΟΥΣΗΣ ΠΝΕΥΜΑ ΑΣΘΕΝΙΑΣ
49	13:10 <sup>119</sup>	ΠΕΡΙ ΤΩΝ ΠΑΡΑΒΟΛΩΝ
50	13:18 <sup>120</sup>	ΠΕΡΙ ΤΟΥ ΕΠΕΡΩΤΗΣΑΝΤΟΣ ΕΙ ΟΛΙΓΟΙ ΟΙ ΣΟΖΟΜΕΝΟΙ
51	13:23, 13:31	ΠΕΡΙ ΤΩΝ ΕΙΠΟΝΤΩΝ ΤΩ ΙΥ ΔΙΑ ΗΡΩΔΗΝ
52	14:1	ΠΕΡΙ ΤΟΥ ΎΔΡΩΠΙΚΟΥ
53	14:7	ΠΕΡΙ ΤΟΥ ΜΗ ΑΓΑΠΑΝ ΤΑΣ ΠΡΩΤΟΚΛΗΣΙΑΣ
54	14:16	ΠΕΡΙ ΤΩΝ ΚΑΛΟΥΜΕΝΩΝ ΕΝ ΤΩ ΔΕΙΠΝΩ

<sup>113</sup> This division is recorded at 9:1 by Goswell ("Early Readers of the Gospels", 162), without comment. Though damaged, the division is pretty clearly not at 9:1.

<sup>114</sup> Goswell comments that "in the *kephalaia* of Alexandrinus, it is misplaced and wrongly numbered at A39" ("Early Readers of the Gospels", 162).

<sup>115</sup> Goswell lists this division at 11:14, but this is clearly in error ("Early Readers of the Gospels", 163).

<sup>116</sup> Goswell lists this division at 11:27, also in error ("Early Readers of the Gospels", 163).

<sup>117</sup> This chapter marker is missing in Alexandrinus, but Goswell lists it as occurring at 13:1.

<sup>118</sup> This chapter marker is also missing in Alexandrinus, but Goswell lists it as occurring at 13:10. However, chapter 49 is marked at 13:10 instead.

<sup>119</sup> Though this marker occurs at 13:10 in Alexandrinus, Goswell places it at 13:18.

<sup>120</sup> Though this marker occurs at 13:18 in Alexandrinus, Goswell places it at 13:23.

No.	Gospel Reference	Titlos in A
55	14:28	ΠΑΡΑΒΟΛΗ ΠΕΡΙ ΟΙΚΟΔΟΜΗΣ ΠΥΡΓΟΥ
56	15:3	ΠΑΡΑΒΟΛΗ ΠΕΡΙ ΕΚΑΤΟΝ ΠΡΟΒΑΤΩΝ
57	15:11	ΠΕΡΙ ΤΟΥ ΑΠΟΔΗΜΗΣΑΝΤΟΣ ΥΪΟΥ ΕΙΣ ΧΩΡΑΝ ΜΑΚΡΑΝ
58	16:1b	ΠΕΡΙ ΤΟΥ ΟΙΚΟΝΟΜΟΥ ΤΗΣ ΑΔΙΚΙΑΣ
59	16:19	ΠΕΡΙ ΠΛΟΥΣΙΟΥ· ΚΑΙ ΛΑΖΑΡΟΥ
60	17:11	ΠΕΡΙ ΤΩΝ ΔΕΚΑ ΛΕΠΡΩΝ
61	18:2b	ΠΕΡΙ ΤΟΥ ΚΡΙΤΟΥ ΤΗΣ ΑΔΙΚΙΑΣ
62	18:10	ΠΕΡΙ ΤΟΥ ΦΑΡΙΣΑΙΟΥ ΚΑΙ ΤΟΥ ΤΕΛΩΝΟΥ
63	18:18	ΠΕΡΙ ΤΟΥ ΕΠΕΡΩΤΗΣΑΝΤΟΣ ΤΟΝ ΙΝ ΠΛΟΥΣΙΟΥ
64	18:35	ΠΕΡΙ ΤΟΥ ΤΥΦΛΟΥ
65	19:1	ΠΕΡΙ ΖΑΧΧΑΙΟΥ
66	19:12	ΠΕΡΙ ΤΟΥ ΠΟΡΟΥΘΕΝΤΟΣ ΛΑΒΕΙΝ ΕΛΥΤΩ ΒΑΣΙΛΕΙΑΝ
67	19:13	ΠΕΡΙ ΤΩΝ ΛΑΒΟΝΤΩΝ ΤΑΣ ΔΕΚΑ ΜΝΑΣ
68	19:29	ΠΕΡΙ ΤΟΥ ΠΩΛΟΥ
69	20:1	ΠΕΡΙ ΩΝ ΗΡΩΤΗΣΑΝ ΤΟΝ ΙΝ ΑΡΧΙΕΡΕΙΣ ΚΑΙ ΠΡΕΣΒΥΤΕΡΟΙ
70	20:9	ΠΑΡΑΒΟΛΗ ΑΜΠΕΛΩΝΟΣ
71	20:20	ΕΠΕΡΩΤΗΣΙΣ ΔΙΑ ΤΟΝ ΚΗΝΣΟΝ
72	20:27	ΠΕΡΙ ΤΩΝ ΣΑΔΔΟΥΚΑΙΩΝ
73	20:41	ΕΠΕΡΩΤΗΣΕΙΣ ΠΩΣ ΕΣΤΙΝ ΥΣ ΔΑΔ Ο ΧΣ <sup>121</sup>
74	21:1	ΠΕΡΙ ΤΗΣ ΤΑ ΛΕΠΤΑ
75	21:5	ΕΠΕΡΩΤΗΣΙΣ ΠΕΡΙ ΣΥΝΤΕΛΕΙΑΣ
76	-- <sup>122</sup>	ΠΕΡΙ ΤΟΥ ΠΑΣΧΑ
77	-- <sup>123</sup>	ΠΕΡΙ ΤΩΝ ΦΙΛΟΝΙΚΗΣΑΝΤΩΝ ΤΙΣ ΜΕΙΖΩΝ
78	-- <sup>124</sup>	ΠΕΡΙ ΤΗΣ ΕΞΛΙΤΗΣΕΩΣ ΤΟΥ ΣΑΤΑΝΑ
79	23:11	ΕΞΟΥΘΕΝΗΣΕΙΣ ΗΡΩΔΟΥ
80	23:27	ΠΕΡΙ ΤΩΝ ΚΟΠΤΟΜΕΝΩΝ ΓΥΝΑΙΚΩΝ
81	23:39	ΠΕΡΙ ΤΟΥ ΜΕΤΑΝΟΗΣΑΝΤΟΣ ΛΗΣΤΟΥ
82	23:50	ΠΕΡΙ ΤΗΣ ΑΙΤΗΣΕΩΣ ΤΟΥ ΣΩΜΑΤΟΣ ΤΟΥ ΚΥ
83	24:18	ΠΕΡΙ ΚΛΕΟΠΑ

The numbers for these chapter divisions appear in the left margins of each column of text, often with a supralinear mark above the numeric character and a 7-shaped *paragraphus* mark below the character. Chapters with both accompanying

<sup>121</sup> Goswell records this *titlos* as beginning with ΕΠΕΡΩΤΗΣΙΣ; this may be an issue of orthography.

<sup>122</sup> Though Alexandrinus has no explicit indication of chapter 76 in the text, Goswell asserts that “this section is marked at two places, Lk. 22.1 and 22.7” and that NA<sup>27</sup> and von Soden “only mark 22.1” (“Early Readers of the Gospels”, 165). Luke 22:1 and 22:7 are marked with a + sign.

<sup>123</sup> This chapter number is missing in the margin of Alexandrinus; Goswell places it at 22:24.

<sup>124</sup> This chapter number is missing in the margin of Alexandrinus; Goswell places it at 22:31.

marks occur at: **Λ** (2:1), **Β** (2:8), **Γ** (2:25), **Θ** (4:38; though the lower mark is only partial), **Ι** (4:40, partial; repeated at 5:1 with both marks), **ΚΖ** (8:43), **[Κ]Ζ** (9:7), **ΚΗ** (9:12), **Λ** (9:28), **ΛΛ** (9:37), **ΛΓ** (9:57), **ΛΖ** (10:38), **ΝΖ** (15:11), **Ξ** (17:11), **ΞΗ** (19:29), **ΟΒ** (20:27), **ΟΔ** (21:1), **ΟΘ** (23:11), and **ΠΓ** (24:18). Chapters appearing with only the supralinear mark occur at: **Δ** (2:36), **Ε** (3:1), **Ζ** (3:14), **Ζ** (4:1), **Η** (4:33), **ΙΒ** (5:12), **ΙΓ** (5:18), **ΙΔ** (5:27), **ΙΕ** (6:6), **ΙΖ** (6:20b), **ΙΗ** (7:2), **ΙΘ** (7:11), **Κ** (7:18), **ΚΛ** (7:37), **ΚΓ** (8:22), **ΚΔ** (8:26), **ΚΕ** (8:41), **ΚΘ** (9:18), **ΛΔ** (10:1), **ΛΕ** (10:25), **ΛΖ** (10:30), **ΛΗ** (11:1), **ΛΘ** (11:27), **Μ** (11:29), **ΜΒ** (11:37), **ΜΓ** (11:46), **ΜΔ** (12:1b), **ΜΕ** (12:13), **ΜΖ** (12:16), **ΜΘ** (13:10), **Ν** (13:18), **ΝΛ** (13:23 and 13:31), **ΝΒ** (14:1), **ΝΓ** (14:7), **ΝΔ** (14:16), **ΝΕ** (14:28), **ΝΖ** (15:3), **ΝΗ** (16:1b), **ΝΘ** (16:19), **ΞΛ** (18:2b), **ΞΒ** (18:10), **ΞΓ** (18:18), **ΞΔ** (18:35), **ΞΕ** (19:1), **ΞΖ** (19:12), **ΞΖ** (19:13), **ΞΘ** (20:1), **Ο** (20:9), **ΟΛ** (20:20), **ΟΓ** (20:41), **ΟΕ** (21:5), **Π** (23:27), and **ΠΛ** (23:39).

In several cases, the chapter numbers that appear with only a supralinear mark are positioned directly atop a Eusebian number, in which case both seem to be indicating the same place of division. This practice is inconsistent, however, as the chapter numbers sometimes appear side by side with Eusebian numbers. Only a few chapter numbers appear without the supralinear or *paragraphus* mark: **ΚΒ** (8:4), **ΛΒ** (9:46), and **ΠΒ** (23:50). In summary, marginal chapter numbers occur: with both the supralinear mark and *paragraphus* 25% of the time; with only the supralinear mark 71.05% of the time; and with no attendant marks 3.95% of the time. Only 76 (91.57%) of the marginal chapter numbers are present in the Gospel.

The order of the title list in Alexandrinus is corrupted for chapters 36-39, where it appears that the *titlos* for chapter 39 was moved prior to chapter 36, causing

chapters 36 through 38 to be displaced in the list. The following bullet lists

succinctly demonstrate the corruption:

**Order in Alexandrinus**

- Chapter 36 (“concerning Martha and Mary”), marked at 10:30
- Chapter 37 (“concerning prayer”), marked at 10:38
- Chapter 38 (“concerning the man having a dumb demon”), marked at 11:1
- Chapter 39 (“concerning the man who fell into the hands of the robbers”), marked at 11:27

**Order According to the Text**

- At 10:30 the text is “concerning the man who fell into the hands of the robbers” (listed in the *kephalaia* table at chapter 39)
- At 10:38 the text is “concerning Martha and Mary” (listed in the table at chapter 36)
- At 11:1 the text is “concerning prayer” (listed in the table at chapter 37)
- At 11:14 the text is “concerning the man having a dumb demon” (listed in the table at chapter 38), but this placement of a chapter number was missed; at 11:27 the text is “concerning the woman from the crowd who lifted her voice” (listed in the table at chapter 40)

This corruption suggests that the scribe who added the chapter numbers to the text performed no content verification against the table—the scribe merely copied the numbers into the text where they appeared in the exemplar. The repetition of chapter 20 and subsequent continuation with chapter 22 would support this conclusion; if the scribe were numbering sequentially, then the chapter number error would cascade. A cascading error does occur beginning with chapter 39, however, since the chapter that should have been marked at 11:14 was missed. The following bullet lists

illustrate the issue:

**Misplaced Chapters in Alexandrinus**

- Chapter 39 (“concerning the man who fell into the hands of the robbers”), marked at 11:27
- Chapter 40 (“concerning the woman from the crowd who lifted her voice”), marked at 11:29

**According to the Text**

- At 11:27 the text is “concerning the woman from the crowd who lifted her voice” (listed in the table at chapter 40)
- At 11:29 the text is “concerning those asking for a sign” (listed in the table at chapter 41)

**Misplaced Chapters in Alexandrinus**

- Chapter 41 (“concerning those asking for a sign”) is unmarked
- Chapter 42 (“concerning the Pharisee who invited Jesus”) is marked at 11:37

**According to the Text**

- This pericope should have been marked at 11:29
- At this point the chapter marking is correct

A similar situation occurs in chapters 75-79, where chapters 76-78 are unmarked in the text but chapter 79 is marked in the proper place. Goswell considers the paragraph indicators in the left margins of the text (+) to be indicative of chapter divisions where the chapter numbers are missed, but has to allocate more than one to chapter 76 for that assignment to work.<sup>125</sup>

Where the upper margin of the manuscript has not been trimmed to the point of eliminating title headings, some of the chapter titles remain visible above the text. If more than one chapter occurs in a particular column of text, the chapters are listed in the margin on separate rows above the column. Very few survive:

**Table 4.14: Marginal chapter notations in Luke**

No.	Page	Col.	Titlos in A
1 2	V4.F21a, 45a	2	ΠΕΡΙ ΤΗΣ ΑΠΟΓΡΑΦΗΣ ΠΕΡΙ ΤΩΝ ΑΓΡΑΥΛΟΥΝΤΩΝ ΠΟΙΜΑΙΝΩ-
[3] 4	V4.F21b, 45b	2	ΠΕΡΙ ΣΥ[ΜΕΙΩΝ] ΠΕΡΙ ΑΝΗΛΣ ΤΗΣ ΠΡΟΦΗΤΕΙΔΟΣ
5	V4.F22a, 46a	2	Π[Ε]ΡΙ ]
6	V4.F22b, 46b	1	ΠΕΡΙ ΤΩΝ ΕΠΕΡΩΤΗΣΑΝΤΩΝ ΤΟΝ ΙΩΑΝ[ΝΗΝ]
7	V4.F22b, 46b	2	ΠΕΡΙ ΤΟΥ ΠΕΙΡΑ[ΣΜΟΥ ΤΟΥ ὉΥ]
10	V4.F23b, 47b	1	ΠΕΡΙ ΤΩΝ ΙΑ[ΘΕΝ]ΤΩΝ ΑΠΟ ΠΟΙΚΙΛΩΝ ΝΟΣΩ-
[14]	V4.F24a, 48a	2	[ΠΕΡΙ ΛΕΥΙ] ΤΟΥ ΤΕΛΩΝΟΥ
[15] 16	V4.F24b, 48b	2	[ ] ΠΕΡΙ ΤΗΣ ΤΩΝ ΑΠΟΣΤΟΛΩΝ [ΕΚΛΟΓΗΣ] <sup>126</sup>

<sup>125</sup> Goswell, “Early Readers of the Gospels”, 165.

<sup>126</sup> The final two characters that appear in partial form at the end of this title (before the shearing removes the title entirely) do not, however, appear to be ΕΚ.

No.	Page	Col.	Titlos in A
-- <sup>127</sup> [28]	V4.F28a, 52a	1	[ΠΕ]ΡΙ ΙΩΑΝΝΟΥ ΚΑΙ ΗΡΩΔΟΥ [ΠΕ]ΡΙ ΤΩΝ ΠΕΝΤΕ ΑΡΤΩΝ ΚΑΙ ΤΩΝ ΔΥΟ ΪΧΘΥΩΝ
-- <sup>128</sup>	V4.F28a, 52a	2	[ ] ΠΡΟΣ ΤΟΥΣ ΜΑΘΗΤΑΣ
[30] 31	V4.F28b, 52b	1	[ ] ΠΕΡΙ ΤΟΥ ΔΑΙΜΟΝΙΖΟΜΕΝΟΥ <sup>129</sup>
32	V4.F28b, 52b	2	ΠΕΡΙ ΤΩΝ ΔΙΑΛΟΓΙΖΟΜΕΝΩ[Ν]
34	V4.F29a, 53a	2	Π[Ε]ΡΙ [ ]
36	V4.F29b, 53b	2	ΠΕΡΙ ΤΟΥ ΕΜΠΕΣΟΝΤΟΣ ΕΙΣ ΤΟΥΣ ΛΗΣΤΑΣ]
44	V4.F31a, 55a	2	ΠΕΡΙ ΤΗΣ [ΖΥΜΗΣ ΤΩΝ] ΦΑΡΙΣΑΙΩΝ
46	V4.F31b, 55b	2	ΠΕΡΙ ΟΥ ΗΥΦΟΡΗΣΕΝ [Η Χ]ΩΡΑ Π[ΛΟΥΣΙΟΥ]
[50]	V4.F32b, 56b	2	ΠΕΡΙ ΤΟΥ ΕΠΕΡΩ[ΤΗΣΑΝ]ΤΟΣ [ΕΙ ΟΛΙΓΟΙ] ΟΙ ΣΩΖΟΜΕΝΟΙ
[59]	V4.F34b, 58b	2	ΠΕΡΙ ΠΛΟΥΣΙΟΥ ΚΑΙ ΛΑΖΑΡΟΥ
[62] [63]	V4.F36a, 60a	1	[Π]ΕΡΙ ΤΟΥ ΦΑ[ΡΙΣΑΙΟΥ ΚΑΙ ΤΟΥ ΤΕΛΩΝΟΥ ΠΕΡΙ ΤΟΥ ΕΠΕΡΩΤΗΣΑΝΤΟΣ ΠΛΟΥΣΙΟΥ ΤΟΝ ΙΝ
65	V4.F36b, 60b	1	ΠΕΡΙ ΖΑΧΧΑΙΟΥ [ ] <sup>130</sup>
[66] [67]	V4.F36b, 60b	2	ΠΕΡΙ ΤΟΥ ΠΟΡΕΥΘΕΝΤΟΣ ΛΑΒΕΙΝ [ΕΛΥΤΩ ΒΑΣΙΛΕΙΑΝ] ΠΕΡΙ ΤΩΝ ΛΑΒΟΝΤΩΝ ΤΑΣ ΔΕΚΑ Μ[ΗΝΑΣ]
[69]	V4.F37a, 61a	2	[ΠΕΡΙ ΩΝ ΗΡΩΤΗΣΑΝ ΤΟΝ ΙΝ ΑΡΧΙΕΡΕΙΣ] ΚΑΙ ΠΡΕΣΒΥΤΕΡΟΙ·
72	V4.F37b, 61b	2	ΠΕΡΙ ΤΩΝ ΣΑΔΔΟΥΚΑΙΩΝ
[73] [74] [75]	V4.F38a, 62a	1	[ΕΠΕΡΩΤΗΣΙΣ ΠΩ]Σ ΕΣΤΙΝ ΥΙΟΣ ΑΛΛ Ο ΧΣ ✠ [ΠΕΡΙ] ΤΗΣ ΤΑ ΔΥΟ ΛΕΠΤΑ ΧΗΡΑΣ ✠ [ΠΕ]ΡΙ ΤΗΣ ΣΥΝΤΕΛΕΙΑΣ ✠
[79]	V4.F40a, 64a	1	[ΕΞΟΥΘΕΝΗ]ΣΕΙΣ ΗΡΩΔΟΥ ✠

<sup>127</sup> This chapter does not appear in the *kephalaia* list for Luke's Gospel; it does appear as chapter 15 of Mark's Gospel.

<sup>128</sup> This partial chapter title (for which the chapter number does not appear) has no match in any of the Old Greek chapter lists.

<sup>129</sup> The title for this chapter in the *kephalaia* list is *περι των σεληνιαζομενου*.

<sup>130</sup> This title may have been followed by a cross (✠).



No.	Page	Col.	Titlos in A
82	V4.F40b, 64b	2	ΠΕΡΙ ΤΗΣ ΛΙΘΕΩΣ ΤΟΥ ΣΩΜΑ[ΤΟΣ ΤΟΥ ΚΥ]

In the Gospel of Luke there is some variation between the *titloi* found in the *kephalaia* list and those written in the upper margin of the Gospel. There are two chapter titles that underwent minor change. In the first, chapter 63, the word order is changed from ΠΕΡΙ ΤΟΥ ΕΠΕΡΩΤΗΣΑΝΤΟΣ ΤΟΝ ΙΝ ΠΛΟΥΣΙΟΥ to ΠΕΡΙ ΤΟΥ ΕΠΕΡΩΤΗΣΑΝΤΟΣ ΠΛΟΥΣΙΟΥ ΤΟΝ ΙΝ. In the second, the title of chapter 74 appears to be expanded from ΠΕΡΙ ΤΗΣ ΤΑ ΛΕΠΤΑ to [ΠΕΡΙ] ΤΗΣ ΤΑ ΔΥΟ ΛΕΠΤΑ ΧΗΡΑΣ; this expansion merely clarifies that there were *two* coins *belonging to a widow*. Additionally, decorated crosses (✠) begin to follow chapter titles toward the end of the Gospel, perhaps as early as chapter 65, but certainly for chapters 73-75 and 79.

Of particular note are the three marginal chapter titles that vary significantly from what is found in the *kephalaia* list prefixed to the Gospel. The first errant chapter title is [ΠΕ]ΡΙ ΙΩΑΝΝΟΥ ΚΑΙ ΗΡΩΔΟΥ, which appears on V4.F28a. This chapter does not appear in the *kephalaia* list for the Gospel of Luke; it is, however, the name of chapter 15 in Mark's Gospel. If I have correctly determined that NT Scribe 1 copied the *kephalaia* list for the Gospel of Luke and NT Scribe 2 copied the actual Gospel text, it is perhaps not surprising to find a discrepancy between the chapter titles of the *kephalaia* list and those found in the upper margin of the Gospel.

The second deviation from the *kephalaia* list is [ ] ΠΡΟΣ ΤΟΥΣ ΜΑΘΗΤΑΣ, which appears above the second column on V4.F28a. While the

phrase (“to the disciples”) appears in none of the *kephalaia* lists for Alexandrinus, it may have been picked up from Luke 9:14 (near the bottom of the first column); the second column begins with Luke 9:16.

The third deviation in chapter naming occurs in chapter 31, which appears as **ΠΕΡΙ ΤΟΥ ΔΑΙΜΟΝΙΖΟΜΕΝΟΥ** in the marginal notation and as **ΠΕΡΙ ΤΩΝ ΓΕΛΗΝΙΑΖΟΜΕΝΟΥ** in the *kephalaia* list. The marginal version of the chapter title appears verbatim as the first chapter of the Gospel of Mark, but nowhere else in the chapter names of the Gospels. The pericope beginning at Luke 9:37 involves Jesus casting a demon from a boy who convulses and screams; the marginal title is certainly applicable to the pericope, especially since the boy is not referred to as an epileptic in the Gospel text; it does represent a deviation from the *kephalaia* list title however.

The deviations of the marginal titles from the *kephalaia* list penned by NT Scribe 1 may suggest an independent text tradition between the two sets of *titloi*. That is, NT Scribe 2 was not reading the *kephalaia* list and marking the Gospel text appropriately, but merely copying the marginal notes from his exemplar. While Alexandrinus represents the oldest extant example of this chaptering system, there is no evidence that the system originated with this codex. As an analogous example, Alexandrinus also contains the earliest example of the Biblical Odes and yet a recent study performed by Miller regarding variants between the Odes and their biblical texts in Alexandrinus concluded that the Odes were being transmitted in an independent, pre-fifth-century *Vorlage*.<sup>131</sup> With so many of the (upper) marginal *titloi* sheared from Alexandrinus, however, there is scant evidence to demonstrate

---

<sup>131</sup> James A. Miller, “‘Let us sing to the Lord’: The Biblical Odes in the Codex Alexandrinus” (PhD diss., Marquette University, 2006).

that there were two (or more) independent streams of transmission for the chapter titles.

### Chapter Divisions in the Gospel of John

The chapter index that precedes the Gospel of John, unlike the other Gospel indices, has no label identifying it at either its beginning or end. That the list is in the first column of the Gospel (which begins in the second column) suggests that the index originated with the production of the text. Despite having retained ample upper margin space through much of the manuscript, no chapter numbers or titles appear in the text's upper margins.

In the Gospel of John there are only 18 *kephalaia*. The numbers for the first five have been lost due to damage, but they are sequential and the *titloi* remain intact.

**Table 4.15: Chapter divisions in John**

No.	Location in A	Titlos in A
[1]	2:1	ΠΕΡΙ ΤΟΥ ΕΓ ΚΑΝΑ ΓΑΜΟΥ
[2]	2:13	ΠΕΡΙ ΤΩΝ ΕΚΒΛΗΘΕΝΤΩΝ ΕΚ ΤΟΥ ΙΕΡΟΥ
[3]	3:1	ΠΕΡΙ ΝΙΚΟΔΗΜΟΥ
[4]	3:25	ΖΗΤΗΣΕΙΣ ΠΕΡΙ ΚΑΘΑΡΙΣΜΟΥ
[5]	4:5	ΠΕΡΙ ΤΗΣ ΣΑΜΑΡΙΤΙΔΟΣ
6	4:46b	ΠΕΡΙ ΤΟΥ ΒΑΣΙΛΙΚΟΥ
7	5:5	ΠΕΡΙ ΤΟΥ ΤΡΙΑΚΟΝΤΑ ΚΑΙ ΟΚΤΩ ΕΤΗ ΕΧΟΝΤΟΣ ΕΝ ΤΗ ΛΣΘΕΝΕΙΑ
8	6:5	ΠΕΡΙ ΤΩΝ ΠΕΝΤΕ ΑΡΤΩΝ· ΚΑΙ ΤΩΝ ΔΥΟ ΙΧΘΥΩΝ
9	6:19 <sup>132</sup>	ΠΕΡΙ ΤΟΥ ΕΝ ΘΑΛΑΣΣΗ ΠΕΡΙΠΑΤΟΥ
10	9:1	ΠΕΡΙ ΤΟΥ ΤΥΦΛΟΥ
11	11:1	ΠΕΡΙ ΛΑΖΑΡΟΥ
12	12:3 <sup>133</sup>	ΠΕΡΙ ΤΗΣ ΑΛΙΨΑΧΗΣ ΤΟΝ ΚΝ ΜΥΡΩ

<sup>132</sup> Goswell comments that “a mark in the margin cannot be seen, but paragraphs start at 6.16 and 19” and subsequently places the division at 6:16, aligning with NA<sup>27</sup> and von Soden (“Early Readers of the Gospels”, 170). However, the numerical marker Θ appears to the left of 6:19, and is so marked here.

<sup>133</sup> Goswell marks this division at 12:2, commenting that NA<sup>27</sup> and von Soden “mark 12.3, where there is no paragraph (but a raised dot)” (“Early Readers of the Gospels”, 170). However, the numerical marker IB appears to the left of the row where 12:3 begins (following a raised point),

No.	Location in A	Titlos in A
13	12:4	ΠΕΡΙ ΩΝ ΕΙΠΕΝ ΙΟΥΔΑΙΟΙΣ
14	12:14	ΠΕΡΙ ΤΟΥ ΟΝΟΥ
15	12:20	ΠΕΡΙ ΤΩΝ ΠΡΟΣΕΛΥΤΩΝ ΕΛΛΗΝΩΝ
16	13:2	ΠΕΡΙ ΤΟΥ ΝΙΠΤΗΡΟΣ
17	15:26	ΠΕΡΙ ΤΟΥ ΠΑΡΑΚΛΗΤΟΥ
18	19:38	ΠΕΡΙ ΤΗΣ ΛΙΤΗΣΕΩΣ ΤΟΥ ΣΩΜΑΤΟΣ ΤΟΥ ΚΥ

The numbers for these chapter divisions appear in the left margins of each column of Gospel text, written in red ink, with a supralinear mark above the numeric character and a 7-shaped *paragraphus* mark below chapters with titles occupying more than one row of text (chapters 7, 8, and 18). Chapters with both accompanying marks occur at: **Α** (2:1), **Β** (2:13), **Γ** (3:1), **Ζ** (4:46b), **Θ** (6:19), **ΙΑ** (11:1), **ΙΒ** (12:3), **ΙΓ** (12:4), **ΙΔ** (12:14), **ΙΖ** (15:26), and **ΙΗ** (19:38). Chapters with only the supralinear mark occur at: **Δ** (3:25), **Ζ** (5:5), **Η** (6:5), **Ι** (9:1), **ΙΕ** (12:20), and **ΙΣ** (13:2). The only chapter with neither accompanying mark occurs at **Ε** (4:5), which appears to have been added after the Eusebian number pair to the left of it, if the awkward placement is any indication. In summary, marginal chapter numbers occur: with both the supralinear mark and *paragraphus* 61.11% of the time; with only the supralinear mark 33.33% of the time; and with no attendant marks 5.56% of the time.

Miracle stories, Goswell notes, are the highlight of the *kephalaia* in this Gospel; when he comments on the “unprecedented” length of text between chapters 9 and 10, noting that this “may suggest that the pages were missing when the *kephalaia* were compiled” it is the lack of a miracle featured in that passage that mitigates that possibility.<sup>134</sup>

---

which is two lines below the raised point for 12:2. With no other indications of a solid division here, 12:3 seems the more likely candidate.

<sup>134</sup> Goswell, “Early Readers of the Gospels”, 171–172.

Notation once extant in the upper margin of the Gospel of John has been sheared, unfortunately; on other pages of the Gospel there is extensive damage at the top of the page (e.g., V4.F48-49 and V4.F54). The lower reaches of characters written in the upper margin are visible at the top of V4.F44, but no complete text remains.

### Summary

As the earliest extant use of Gospel chapter divisions in the Greek witnesses, the use of *kephalaia* and *titloi* in Alexandrinus are of interest in understanding how the Gospels were interpreted and how the chaptering interacted with unit delimitation (in the section on Unit Delimitation in Chapter 5, these data will be particularly useful in evaluating how the Gospel texts were paragraphed). Placement of the chapter lists with respect to the text of the Gospels (e.g., in the first column of V4.F42a) indicates that the chaptering was a product of the original manuscript production.

The chaptering system in the Gospels consisted first of a numbered index preceding each Gospel, with a descriptive chapter title accompanying the chapter number. Second, the chapter titles were written in the upper margin of each Gospel on the leaf in which the chapter began; unfortunately, much of this notation was lost when the codex was trimmed and bound. NT Scribe 1, responsible for the Gospels of Matthew and Mark, only provided these upper margin chapter references. NT Scribe 2, responsible for the Gospels of Luke and John, both noted chapter numbers in the left margins of the Gospels and listed the chapter references in the upper margin of the appropriate leaves. When NT Scribe 2 added chapter numbers to the left margins of the Gospel texts, there appears to be little consistency in how the

chapter numbers were ornamented. Some are marked with a supralinear mark and a *paragraphus*, some with just the supralinear mark, and a few with no ornamentation at all. All of the marginal chapter notes of the Gospels were made in rubric, though the red ink has corroded to black in many places.

Comparing the few remaining upper margin notes with the chapter indices at the head of each Gospel, there are some differences in the chapter names found in the Gospel of Luke that are difficult to explain (especially with so few data). It is probable that the Old Greek chapter titles used in the marginal notes circulated in an independent tradition from the *titloi* found in the chapter indices. Although outside of the scope of this study, it may be fruitful to search the chaptering systems of manuscripts from the early versions (Old Latin, Syriac, and Coptic) to determine if the chaptering found in Luke's upper margin was influenced by another family of manuscripts.

### Conclusion

The palaeographical analysis in this chapter included not only an appraisal of historical judgments regarding distinguishing features found in the letter shapes but also a fresh examination of the forms. This new look at the letters used in the NT books overturned the conclusion of Skeat and Milne that a single hand copied the Gospels and confirmed the view of Woide, Thompson, Kenyon, and Cavallo that two hands were at work in copying the Gospels: NT Scribe 1 was the copyist for the Gospels of Matthew and Mark and the *kephalaia* list of Luke; NT Scribe 2 was the copyist for the Gospels of Luke and John. Analyzing the frequency of word divisions at the end of lines yielded no significant difference between the scribes,

both overall and with regard to frequency of divisions in the first and second columns of text. One pattern of word division did, however, support the differentiation between the scribes: NT Scribe 2 divided the long *nomen sacrum* for *ουρανός* at the ends of lines while NT Scribe 1 never divided *nomina sacra* at the ends of lines.

Though the primary ink used in the codex was black, a number of features made use of the *minium* red ink. The initial few rows of text at the beginnings of books, the *kephalaia* lists in the Gospels, the decorative tailpieces at the ends of books, and a number of other paratextual features were richly decorated using a red ink or a combination of black and red ink. The use of color is relatively consistent throughout the Gospels, the one exception being the *kephalaia* list for the Gospel of Luke. Because that *kephalaia* list, which was copied by NT Scribe 1, is part of the 3 anomalous leaves attached to the beginning of an unusual, 11-leaf quire, the lack of rubrication in the list may indicate that the 3-leaf addition was rushed or produced correctively by NT Scribe 1.

The tailpiece designs found in Alexandrinus occupy a unique place in the history of biblical manuscript illumination. Certainly more study of the miniature art and *coronis* forms may yield further information. Though Skeat and Milne sought to demonstrate that a single hand was at work in the Gospels of Alexandrinus through the use of *coronis* art, their position can no longer be supported. Even setting palaeographical and codicological data aside, the argument is no longer compelling.

Studying the transmission of the Eusebian Apparatus in Alexandrinus was particularly fruitful. First, the individual practices of the two scribes in the implementation of the Apparatus in the Gospels further supports the differentiation

concluded by the palaeographical analysis of the letter forms; while conforming to the template for the number pairs defined in the Epistle to Carpianus, the style of ornamentation for each scribe was plainly apparent. Second, the Eusebian number pairs, which experienced increasingly higher transmission error rates with each consecutive Gospel, were added in conformation to the paragraphing present in the text and not the other way around. That is, where the position of the Ammonian sections varied in Alexandrinus from the normalized position in NA<sup>27</sup>, the sections in Alexandrinus naturally gravitated toward the unit divisions of the text. Third, the unusual feature of cascading errors occurring in the transmission of the canon number values in the Apparatus provides a means of understanding how the Apparatus was reproduced. I conclude that the Ammonian sections were added to a page and then the canon numbers were added *as a group* to the page. Because each scribe read the numbers from the exemplar as a list and then sequentially paired them with section numbers, the unique conditions for the cascading error were met. The distinctive transmission error rates for the two scribes (for both position and canon number) confirm that two scribes were responsible for producing the Eusebian Apparatus, and palaeographical evidence affirms this as well. It appears that NT Scribe 2 was more error-prone in producing the Apparatus than NT Scribe 1.

The Gospels of Alexandrinus represent the oldest extant implementation of the Old Greek chaptering system. The analysis of the system demonstrates differing practices between the two Gospel scribes and the variations found in Luke suggest that the marginal *titloi* were transmitted independently of the *kephalaia* lists that prefixed the Gospels.



## CHAPTER V

### SCRIBES

#### **Overview of the Scribal Hands**

The identification and delineation of different scribal hands in Alexandrinus has occasioned debate, a brief history of which follows. In his 1786 edition of the Greek NT, Woide asserted that there were two scribes at work in the text. When the first facsimile of the codex was produced under the guidance of Edward Maunde Thompson between 1879 and 1881, Thompson identified two scribes at work in the Gospels with the hand changing at the beginning of Luke's Gospel text. During the production of the second (reduced) facsimile between 1909 and 1957, the British Museum's Keeper of Manuscripts Frederic Kenyon postulated that there were two scribal hands for the production of the Old Testament and three other hands for the NT. More recently, the scribes of Alexandrinus received three pages of discussion in an appendix of Skeat and Milne's 1938 *Scribes and Correctors of Codex Sinaiticus*; in disagreement with Kenyon's conclusion regarding the number of scribes, Skeat and Milne concluded from the tailpiece designs (or *coronides*) and palaeographic features that there were only two hands involved in the production of the entire codex. The text received a similarly brief treatment in two popular publications by Skeat and Milne disseminated by the Trustees of the British Museum in *The Codex Sinaiticus and the Codex Alexandrinus* in 1938, with an updated second edition in 1963. In 1939, Kenyon responded with disagreement to the conclusions of Skeat and

Milne in *Our Bible and the Ancient Manuscripts*, to which Skeat replied in his 1957 introduction to the final installment of the *Reduced Facsimile*.

This study will survey the evidence presented by each of these historical discussions and, after additionally evaluating the data from the manuscript, conclude that there are two scribes at work in the Gospels. The broader question of number of scribes *throughout* the codex is beyond the scope of this work.

### Historical Perspectives on the Scribes

#### *C. G. Woide*

Woide noted in his edition of the NT text of Alexandrinus (1786) that two hands were evident in the text. Based on ink and parchment (see Chapter 3 for details), differences in letters, the beginnings of books, the chapter divisions, and use of the Eusebian apparatus, Woide determined that the work of the two scribes was divided in this way:

1. Matthew, Mark, the κεφάλαια for Luke, 2 Corinthians 10:8 to the end of the letter, all the Pauline epistles (including Hebrews) except Romans and 1 Corinthians, and Revelation
2. Luke, John, Acts, the Catholic epistles, Romans, 1 Corinthians, and 2 Corinthians 1:1–10:8<sup>1</sup>

Woide appears to be reporting a change of hand at 2 Corinthians 10:8, but this must be unintentional, since that portion of 2 Corinthians is missing from Alexandrinus

---

<sup>1</sup> M. Gottlieb Leberecht Spohn, *Caroli Godofredi Woidii Notitia Codicis Alexandrini cum variis eius lectionibus omnibus* (Leipzig: Sumtibus I. G. I. Breitkopfii, 1788), 21–22.

and a change of scribes at 1 Corinthians 10:8 is reported by others.<sup>2</sup> Woide was silent on the Clementine epistles.

### ***E. M. Thompson***

The fourth volume of the full-sized facsimile of Alexandrinus (containing the NT) was the first to be published by the British Museum. In the introduction to that volume, written in 1879, Thompson identified two scribes at work in the NT based on the handwriting:

1. the first penned Matthew through Mark and the *kephalaia* of Luke (V4.F2–19; 18 folia), and everything following 1 Corinthians 10:8 (V4.F96–144; 49 folia);
2. the second penned Luke, John, Acts, the Catholic Epistles, Romans, and 1 Corinthians up through 10:8 (V4.F20–95; 76 folia).

Scribe 2 was identified by Thompson based on the following criteria: (1) “the letters [of this scribe] are more widely spaced and are a little larger than elsewhere”; (2) the base of **Δ** and the cross-stroke of **Π** are both extended by this scribe but not the other; (3) this scribe used thicker vellum and a more yellow ink; and (4) “the use of crosses affixed to the *kephalaia*,... to the beginnings of Books, and occasionally to the last line of a column” (as opposed to the 7-shaped *paragraphus* used elsewhere

---

<sup>2</sup> Woide’s observation: “*Priori* atramento reliquiae Matthaei, Marcus, et index Periocharum Lucae et deinde secunda epistola ad Corinthios a medio versus octavi Capitis decimi, nec non reliquae epistolae Pauli, epistola ad Hebraeos, et revelatio Ioannis exaratae sunt ; *posteriori* Lucas, Ioannes, Acta Apostolorum, epistolae catholicae omnes, epistola ad Romanos, prima ad Corinthios et secunda ad medium versus octavi Capitis decimi” (Spohn, 21).

for the same function).<sup>3</sup> Thompson also evaluated the position of Woide to be inadequate:

Woide, who has also noticed this change of hand in the preface to his edition of the NT (1786), p. iv., cites, in addition to other marks of distinction, small differences in the references to the Eusebian canons and in the forms of marginal quotation-signs. As regards the former, an examination of the MS. proves that he is only partially correct; while, as regards the latter, it shows that he is absolutely wrong. The horizontal stroke between the Ammonian number and the Eusebian canon, which he regards as a distinguishing mark of the second hand, is also found in the earlier part of the volume, e.g. ff. 9b (33b), 11b (35b); and on the other hand it is not infrequently wanting in SS. Luke and John. And the small arrow-head without the accompanying dot (the form which he confines to the second hand) is the ordinary mark of quotation, except in a few places, e.g. ff. 13 (37), 14 (38), 15 (39), 50 (76), 57 (83), where too the dot is only an addition by the rubricator.<sup>4</sup>

Regarding the OT, Thompson remained vague in his delineation of the hands.

When the first volume of the *Facsimile* was issued (1881), his only observation was that “the style of writing in vol. iii is for the most part different from that of the other volumes; and the system almost uniformly observed in this volume, of keeping the large initial letters within the marginal line of the text, is contrary to the usual practice.”<sup>5</sup> He likened this difference to what is found in the volume of the NT, where Scribe 2 intervenes. This rough outline of delineation is reflected in the table that follows below.

---

<sup>3</sup> *Facsimile of the Codex Alexandrinus* (London: Trustees of the British Museum, 1879–1883), 4:5. Scrivener later criticized Thompson’s assignment of two scribes to the NT, stating: “His reasons appear to us precarious and insufficient, and he seems to cut away the ground from under him when he admits (Præf. p. 9) that ‘sufficient uniformity is maintained to make it difficult to decide the exact place where a new hand begins’” (Frederick Henry Scrivener, *A Plain Introduction to the Criticism of the New Testament for the Use of Biblical Students*, 3d ed. [Cambridge: Deighton, Bell, and Co, 1883], 97).

<sup>4</sup> *Facsimile*, 4:5.

<sup>5</sup> *Facsimile*, 1:9.

### ***F. G. Kenyon***

In his introduction to the *Reduced Facsimile* of the NT published in 1909, Kenyon posited that there were five scribes at work in Alexandrinus. He distributed the work of the five scribes as follows:

1. Octateuch, Prophets, 1–4 Maccabees, Job, Proverbs, Ecclesiastes, Song of Songs, Wisdom of Solomon, Ecclesiasticus
2. 1–4 Kings, 1–2 Chronicles, Esther, Tobit, Judith, 1–2 Esdras, Psalms, Clementine Epistles
3. Matthew, Mark (with table of κεφάλαια for Luke), 1 Corinthians 10:8-Philemon (Hebrews precedes the Pastoral Epistles)
4. Luke-1 Corinthians 10:8 (including Catholic Epistles, which follow Acts)
5. Apocalypse<sup>6</sup>

Kenyon justified this distribution based on several factors, judging that the scribal hands varied in: (1) letter forms; (2) paragraphing practice; (3) width of ruled columns; (4) spacing between lines and letters; (5) color of ink; (6) and the change of ruling evident at folio 95 (V4.F96, which begins 1 Cor 10:8) of the NT.<sup>7</sup> In the Gospels the delineation between the work of Scribe 3 (penning the Gospels of Matthew and Mark) and Scribe 4 (penning Luke and John) was made based on the following contrasts between them: Scribe 4 has “a smoother, softer, lighter hand,” uses a “reddish-brown” ink, often begins paragraphs “in the middle of a line”

---

<sup>6</sup> *RF<sup>NT</sup>*, 10.

<sup>7</sup> *RF<sup>NT</sup>*, 8; Kenyon also notes that the bounding lines for the text columns change “after f[olio] 18” in the third volume of the OT (in the midst of Psalms) from single to double lines. See Chapter 3 for a discussion of the ruling.

(though Scribe 3 does as well), and has unique letter shapes for **Π** and **Υ** (as discussed in Chapter 3).<sup>8</sup>

***T. C. Skeat & H. J. M. Milne***

Based on differences in letter formation, unit delimitation patterns, and colophon (tail-piece) designs, in 1938 Skeat and Milne found two scribes “easily distinguishable” in the OT portion of Alexandrinus.<sup>9</sup> They divided the scribal hands of the OT books accordingly:

1. Octateuch, Prophets, Maccabees, Job-Ecclesiasticus
2. Kings, Chronicles, Esther-2 Esdras, Psalms, the letter of Athanasius, Canticles<sup>10</sup>

This list is in agreement with Kenyon’s delineation of scribal territories in the OT. Unlike Kenyon, however, they did not agree that “three entirely new hands” were seen in the NT, and reproduced the codex’s colophons in color to demonstrate that they were of “prime importance” in proving their case.<sup>11</sup> Skeat and Milne found a great resemblance between the work of Scribe 2 and the scribe of the Clementine epistles and also between Scribe 1 and Kenyon’s three NT scribes—not only in formation of letters but in “other, less subjective” features, “particularly the colophon types, the surviving flourishes and designs of the original quire numerations (mostly

---

<sup>8</sup> *RF<sup>NT</sup>*, 10.

<sup>9</sup> T. C. Skeat and H. J. M. Milne, *The Codex Sinaiticus and the Codex Alexandrinus with Six Illustrations* (London: Trustees of the British Museum, 1938), 32.

<sup>10</sup> The more complete list is found in H. J. M. Milne and T. C. Skeat, *Scribes and Correctors of the Codex Sinaiticus* (London: British Museum, 1938), 92.

<sup>11</sup> Skeat and Milne, *Scribes and Correctors*, 91.

much cropped), the new-paragraph habits, and orthography.”<sup>12</sup> Thus Skeat and Milne concluded that only two scribes were at work in the OT and those same two scribes also copied the NT. For the NT they determined that the second scribe produced only the Clementine epistles and the first scribe produced everything else.

While describing the hands of the NT texts of Alexandrinus in his volume *Our Bible and the Ancient Manuscripts*, Kenyon briefly commented that this assessment of Skeat and Milne “seems to ignore certain marked differences of script.”<sup>13</sup> Skeat replied to this brief rejoinder when the final volume of the *Reduced Facsimile* was published in 1957, suggesting that Kenyon’s use of the letter  $\pi$  to delineate between Scribe 3 (who employed a short horizontal stroke that simply connected one *hasta* to the other) and Scribe 4 (who employed a longer horizontal stroke that extended beyond both *hastae*) was insufficient since “at least three of Kenyon’s five scribes could, and on occasion did, use both forms of the letter.”<sup>14</sup> As a result, Skeat concluded that “at present it is doubtful whether any conclusions can be reached as to the number of scribes without a much more extensive investigation of the entire manuscript than has yet been attempted.”<sup>15</sup>

### *Cavallo*

In 1967, Cavallo summarized the conclusions of Kenyon (1909) and Skeat and Milne (1938) regarding the different hands at work in Alexandrinus and concluded that *three* hands were indeed present in the NT: “Tale possibilità, a

---

<sup>12</sup> Skeat and Milne, *Scribes and Correctors*, 92–93.

<sup>13</sup> Frederic Kenyon, *Our Bible and the Ancient Manuscripts* (London: Eyre and Spottiswoode, 1958), 199. The comment was originally made in the 1939 edition (136).

<sup>14</sup> *RF<sup>OT</sup>*, 4:2.

<sup>15</sup> *Ibid.*

giudicare da fondamenti grafico-stilistici, va tradotta quasi in certezza, e quindi sarei del parere di attribuire senz'altro a tre scribe l'Allesandrino.”<sup>16</sup> Cavallo commented that both Kenyon and Skeat and Milne noted a possible change of hand at 1 Corinthians 10:8 (with Kenyon accepting that as a separate hand), but Cavallo believed that the distinctive Π that marks that point of potential delineation at 1 Corinthians 10:8 is witnessed as early as 1 Corinthians 6:18. Cavallo went on to provide a more detailed palaeographical examination of the manuscript, and that analysis is discussed in detail in Chapter 3 above.

### Conclusion

With regard to the scribes of Alexandrinus, the *status quaestionis* currently rests on the work of Skeat and Milne, with little recognition of the subsequent modification by Cavallo. For example, in his 2006 study of scribal habits in the Apocalypse across three codices (Sinaiticus, Alexandrinus, and Ephraemi), Hernández portrays the view of Kenyon as trumped by the “careful analysis” of Skeat and Milne.<sup>17</sup> Parker notes that the codex was “written by either two or three scribes” and cites Skeat and Milne (but not Cavallo) in his bibliography.<sup>18</sup> However, as Skeat himself concluded: a more extensive investigation might lead a more conclusive answer.

The palaeographical work performed in Chapter 4 successfully challenges the conclusion that a single scribe was responsible for all four Gospels in Alexandrinus

---

<sup>16</sup> Guglielmo Cavallo, *Ricerche sulla maiuscola biblica* (Firenze: Le Monnier, 1967), 77–78.

<sup>17</sup> Juan Hernández, *Scribal Habits and Theological Influences in the Apocalypse: The Singular Readings of Sinaiticus, Alexandrinus, and Ephraemi* (Tübingen: Mohr Siebeck, 2006), 101–102.

<sup>18</sup> D. C. Parker, *An Introduction to the New Testament Manuscripts and Their Texts* (Cambridge: Cambridge University, 2008), 75.



and vindicates Kenyon's division of scribal hands within the canonical NT books. Letter forms and scribal habits regarding paratextual features in the text, including minor features in the tailpiece art at the end of books, can be used to divide the canonical NT books across the work of three separate hands. The palaeographical conclusions of Chapter 4 is subsequently confirmed by the codicological study of the Gospels in Chapter 3, which, through statistical analysis, provides an objective means of validating the division of hands posited in Chapter 4. Ultimately, the conclusion of Skeat and Milne—that the whole of the canonical NT books could be attributed to a single hand due to an analysis of palaeographic features and tailpiece designs—cannot be sustained under the scrutiny of more detailed analysis; Cavallo rightly recognized the division of hands in the Gospels was necessary. The conclusion of this accumulation of analysis is that there were three hands responsible for the copying of the canonical NT books:

- NT Scribe 1: Gospels of Matthew and Mark; *kephalaia* list for the Gospel of Luke; 1 Corinthians 10:8 through Philippians.
- NT Scribe 2: Gospel of Luke through 1 Corinthians 10:8.
- NT Scribe 3: Revelation.

**Table 5.1: Attribution of Scribes in the OT**

Book	Thompson (1881)	Kenyon (1909)	Skeat/Milne (1938)
Genesis	OT Scribe 1	Scribe 1	Scribe 1
Exodus			
Leviticus			
Numbers			
Deuteronomy			
Joshua		Scribe 2	Scribe 2
Judges			
Ruth			
1–4 Kings			
1–2 Chronicles			
[Prophets]		Scribe 1	Scribe 1
Esther		Scribe 2	Scribe 2
Tobit			
Judith			
1–2 Esdras		Scribe 1	Scribe 1
1–4 Maccabees			
Epistle of Athanaseus	OT Scribe 2		Scribe 2
Hypotheses			
TOC Psalms			
Canons (day)			
Canons (night)			
Psalms		Scribe 2	Scribe 2
Odes			
Job		Scribe 1	Scribe 1
Proverbs			
Ecclesiastes			Scribe 2
Song of Songs			
Wisdom			Scribe 1
Ecclesiasticus			

**Table 5.2: Attribution of Scribes in the NT**

Book	Woide (1786)	Thompson (1879)	Kenyon (1909)	Skeat/Milne (1938)	Cavallo (1967)
Matthew	Scribe 1	Scribe 1	Scribe 3	Scribe 1	Scribe 1
Mark					
Luke	Scribe 2 <sup>19</sup>	Scribe 2	Scribe 4		Scribe 3
John					
Acts					
James					
1 Peter					
2 Peter					
1 John					
2 John					
3 John					
Jude					
Romans					
1 Corinthians					
2 Corinthians	Scribe 1	Scribe 1	Scribe 3		Scribe 1
Galatians					
Ephesians					
Philippians					
Colossians					
1 Thessalonians					
2 Thessalonians					
Hebrews					
1 Timothy					
2 Timothy					
Titus					
Philemon					
Apocalypse					
1 Clement			Scribe 2	Scribe 2	Scribe 2
2 Clement					
Psalms of Solomon					

<sup>19</sup> Woide appears to be marking the change of scribes at 2 Corinthians 10:8—which would be an obvious error since there is a lacuna in that section of 2 Corinthians; the table reflects a correction to 1 Corinthians 10:8.

## Unit Delimitation

### Introduction

Studies of Greek biblical manuscripts have historically focused on the *content* of the texts they contain, with any discussion of a manuscript's structural markers or other related paratextual features rarely venturing beyond noting their presence or absence. Occasionally the claim is made that the earliest manuscripts were without structural markers such as spacing or punctuation. For example, in the 18th century, J. D. Michaelis curiously (and repeatedly) asserted that the stops in biblical manuscripts are of little interest to scholarship because "the most ancient manuscripts were without them" (Michaelis believed that only school texts featured text delineators).<sup>20</sup> In a more recent example, the writer of a NT Greek grammar claims "there is no punctuation in the earliest manuscripts of the New Testament" and ends the matter there.<sup>21</sup> However, various forms of unit delimitation *do* occur in the earliest extant manuscripts, including the use of spacing (inserted into otherwise continuous script), rudimentary punctuation, *ekthesis* (the projection of a character into the left margin, often enlarged), and utilization of larger unit markers such as the *paragraphus*<sup>22</sup> (or *παράγραφος*, and infrequently *παραγραφή*).<sup>23</sup>

---

<sup>20</sup> John David Michaelis, *Introduction to the New Testament*, 4th ed., trans. Herbert Marsh, vol. 2 (London: R. Gilbert, 1823), 516.

<sup>21</sup> David Allen Black, *Learn to Read New Testament Greek*, 3d ed. (Nashville: B&H Publishing, 2009), 6.

<sup>22</sup> Of early biblical Greek papyri, P<sup>47</sup> (late third century) is the only obvious example of an early Gospel MS without some form of punctuation or unit delimitation. Otherwise, the papyri commonly have some form of punctuation, even if scarce (e.g., P<sup>75</sup> [c. AD 200], P<sup>45</sup> [third century], P<sup>46</sup> [c. AD 200], etc.). Very small papyrus fragments are not considered here.

<sup>23</sup> There may be differentiation between the two terms, however. LSJ provides one example of *παραγραφή* referring to marking a spurious passage of text—the rhetorical question of whether Homer's praise of Briseis was the product of textual emendation (ἐν τῇ παραγραφῇ τῶν ὀβελῶν) is posed in Lucianus (*Pr. Im.* 24). Likewise, Turner cites Isocrates as using the term *paragraphe* "as a

In early 20th century scholarship there was only occasional consideration of patterns in unit delimitation among biblical manuscripts. Prior to the finds at Qumran, thoughts on unit delimitation in pre-Masoretic Hebrew Bible texts remained speculative. With regard to the Greek Bible, comments on division into large and small sense units remained general in nature and were typically only used to aid in dating a manuscript. However, as the century progressed, sense units were occasionally and progressively given greater consideration. In a rare exception, Henry Sanders, while recording the palaeographical features of the Freer Manuscripts in 1912, noted that the spacing and punctuation in W, when compared with D, Δ, and the Curetonian Syriac, appeared to carefully preserve “the original στίχοι.”<sup>24</sup> With the subsequent discovery and publication of the Bodmer papyri in the 1950s, the similarity of sense-unit division in the fifth century manuscripts of Washingtonianus and Codex Bezae was revisited by Victor Martin. Martin noted that, despite variation in the signs used to mark delimitation, the divisions present in W and D are also present in P<sup>66</sup> and must indicate a system of delimitation dated back to the second century.<sup>25</sup> This kind of attention to unit delimitation represents the exception rather than the rule.

In recent years there has been a growing interest in understanding what the presence of these features indicates regarding their use in biblical documents. In the summer of 1999 Marjo C. A. Korpel and a number of her colleagues launched an

---

technical term to divide what one speaker says from another” (Eric G. Turner, *Greek Manuscripts of the Ancient World* [Princeton: Princeton University Press, 1971], 10).

<sup>24</sup> Henry Arthur Sanders, *The New Testament Manuscripts in the Freer Collection: Part I, the Washington Manuscript of the Four Gospels* (New York: MacMillan, 1912), 13–14.

<sup>25</sup> Victor Martin, *Papyrus Bodmer II: Evangile de Jean chap. 1–14* (Cologny-Genève: Bibliothèque Bodmer, 1956), 18–21. A στίχος is a line of prose with 15 or 16 syllables.

international program called Pericope that had as its aim “collecting as much data as possible about unit delimitation in ancient manuscripts of the Bible.”<sup>26</sup> The program dissolved in 2007 with its participants deciding to submit papers to broader research sessions, but in the intervening years, the Pericope series contributed several volumes of findings to the nascent field of delimitation criticism. Research in delimitation criticism has not been limited to the concerns of textual criticism. Indeed, as the decision of an author or scribe to divide a text naturally influences how the text is read and interpreted, one researcher notes that unit divisions function to differentiate content that is divided, to relate grouped materials, and also to highlight and downplay textual content.<sup>27</sup>

Although the work of the Pericope series served to inform the *types* of questions asked in this section, the work of Acker and Thompson proved influential in framing the specific questions. With regard to punctuation and spacing, Acker’s work on Codex Argenteus Upsaliensis<sup>28</sup> was helpful in considering the relationship between different delimitation schemes. To an extent, Jongkind also studied the relationship between different delimitation schemes in Sinaiticus, but sought to answer different questions regarding paragraphing than those that were of interest in Alexandrinus.<sup>29</sup> With regard to the paragraphing scheme used in Alexandrinus,

---

<sup>26</sup> Marjo C. A. Korpel, “Introduction to the Series Pericope,” in *Delimitation Criticism*, ed. Marjo Korpel and Josef Oesch (Assen: Van Gorcum, 2000), 21.

<sup>27</sup> Greg Goswell, “The Divisions of the Book of Daniel,” in *The Impact of Unit Delimitation on Exegesis*, ed. Raymond de Hoop, Marjo C. A. Korpel, and Stanley E. Porter (Leiden: Brill, 2009), 89–91.

<sup>28</sup> Geoffrey Bernard Acker, “The Codex Argenteus Upsaliensis: A Codicological Examination” (PhD diss., University of Illinois, 1994), 86–92.

<sup>29</sup> Dirk Jongkind, *Scribal Habits of Codex Sinaiticus* (Piscataway, NJ: Gorgias Press, 2007), 98–109. For example, Jongkind examined paragraphing frequency in Sinaiticus, which is most useful when more than one scribe is involved in the transmission of a given book. Since, in Alexandrinus,

Thompson's comment that the use of the *paragraphus* in the manuscript indicated that the scribes had "begun to forget the meaning and proper use of the mark"<sup>30</sup> prompted the desire to create a full mapping of the paragraphing scheme (see Appendix E) and to understand and explain the structure.

As attention to unit delimitation is relatively new, it is no great surprise that a systematic examination of the methods of unit delimitation used in Codex Alexandrinus has been lacking.<sup>31</sup> The following sections will attempt to fill that gap by first comparing contemporary practices of unit delimitation in scriptural Hebrew with the OT books in Alexandrinus; and second, by looking more specifically at features found in *biblical* Greek texts; and third, by examining the features of unit delimitation found in Greek manuscripts and evaluating the system found in Codex Alexandrinus in light of contemporary practices.

### Unit Division in Hebrew Scriptures

Division of scriptural text into both large and small sense units is a phenomenon observed in Hebrew manuscripts (both biblical and non-biblical) predating and contemporary to the first century. The delimiters for sense units in these texts

---

the Gospels of Matthew and Mark were copied by NT Scribe 1 and the Gospels of Luke and John were copied by NT Scribe 2, analysis of paragraphing frequency was not appropriate.

<sup>30</sup> Edward Maunde Thompson, *An Introduction to Greek and Latin Palaeography* (Richmond: Tiger of the Stripe, 2008), 62.

<sup>31</sup> Most recently, in a 2012 dissertation, Ahn analyzed the unit delimitation encountered in a number of Greek manuscripts (including Alexandrinus); however, perhaps due to the number of manuscripts studied for the analysis, Ahn's handling of the unit delimitation utilized in Alexandrinus appears to be quite rudimentary (Jeongseop Ahn, "Segmentation Features in New Testament Manuscripts: An Overlooked Resource for Editors and Translators" [PhD diss., New Orleans Baptist Theological Seminary, 2012]). Unfortunately, Ahn did not have access to any research materials documenting the unit delimitation found in Alexandrinus.

include use of spacing, *paragraphoi* (consisting of a horizontal mark), *Großabteilen* (a circle with a curved line beneath it), and the *petuhot* (פ) and *setumot* (ס).

Even the earliest texts of the Hebrew Bible found at Qumran demonstrate a use of spacing for unit delimitation that was not unique to biblical texts.<sup>32</sup> The system of spacing used to divide a text was more widespread than was thought prior to the discoveries at Qumran; Tov notes that this subdivision of text into meaningful units through the use of spacing occurs in biblical and non-biblical (but not documentary) texts found in the Judean Desert, in most Hellenistic Greek texts (though again, not documentary texts), and in fifth and fourth century BC Aramaic texts.<sup>33</sup> Additionally, he asserts that the content of the Hebrew manuscripts was divided according to both small and large sense units—but that there is a relational structure of dividing the large units into smaller units “may well be a western concept.”<sup>34</sup>

The entirety of the Hebrew Bible, with the exclusion of the Psalms, is divided into open and closed paragraphs or *parashiyyot*. An open paragraph (or פְּתוּחָה) starts a new line after a blank or complete line, while a closed paragraph (or סְתוּמָה) is delineated from the previous paragraph with a short space; later these paragraphs

---

<sup>32</sup> Ludwig Blau, *Papyri und Talmud in gegenseitiger Beleuchtung* (Leipzig: Gustav Fock, 1913), 15. Blau noted that spacing is used instead of marks (*Zeichen*) because, with marks, “solche würden nämlich als Zusätze zum heiligen Texte empfunden worden sein.”

<sup>33</sup> Emanuel Tov, “Sense Divisions in the Qumran Texts, the Masoretic Text, and Ancient Translations of the Bible,” in *The Interpretation of the Bible*, ed. Jože Krašovec (Sheffield: Sheffield Academic Press, 1998), 121–122.

<sup>34</sup> *Ibid.*, 123. Tov also suggests that unit delimitation may be an *ad hoc* process initiated by the scribe. The structure of some divisions is colometric in nature, as is evidenced by some poetry found in the Judean Desert (Korpel, “Introduction,” 11). Goswell disagrees with this somewhat (“The Divisions of the Book of Daniel,” 98).



were prefixed with פ and כ respectively, regardless of how the text was formatted.<sup>35</sup>

This spacing system presumes the paratextual feature of predictable left and right borders for a block of text.

Specifically, an open paragraph (or פתוח) is a paragraph that begins following a blank or incomplete<sup>36</sup> line of text. If the final line of a paragraph does not extend to the left margin of the text block, the rest of that line is left blank and the first line of the following paragraph starts a new line; otherwise, if the final line of a paragraph extends all the way to the left margin, then a blank line is left between that paragraph and the next one. Thus (with “X” representing a Hebrew character) open paragraphs may take a few forms:

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

or

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

In comparison, a closed paragraph (or סתום) is a paragraph that begins after a space following the preceding paragraph, without introducing a new line. Additionally, a

---

<sup>35</sup> Ernst Würthwein, *The Text of the Old Testament*, 2d ed., rev. and enl., trans. Erroll F. Rhodes (Grand Rapids: Eerdmans, 1995), 20; Christian D. Ginsberg, *Introduction to the Massoretico-Critical Edition of the Hebrew Bible* (London: Trinitarian Bible Society, 1897), 10.

<sup>36</sup> The term “incomplete” here indicates that the text does not extend to the left border of the block of text.

closed paragraph may begin with an indented line with the previous line being either complete or incomplete.<sup>37</sup> Thus:

```
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX                      XXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

or

```
                XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

In the latter example the combined *petuḥah* (the space at the end of a line) and *ziah* (the space at the beginning of a new line) are equivalent to a סְתוּמָה.<sup>38</sup> Because it is only in later manuscripts that open and closed paragraphs are prefixed (with פ and ס respectively) to indicate unit divisions when the format of the text does not formally adhere to them, this formatting is not of interest to this study.

The Hebrew Scriptures are also subdivided for lectionary purposes according to somewhat larger sense units. These two lectionary systems, the first Palestinian in origin and the second Babylonian, are: the division of the Hebrew Bible into 452 *Sedarim* (weekly lessons) to produce a three year cycle of readings; and the division of the Torah into 53 or 54 *Parashoth* (weekly lessons) to produce a one year cycle of readings.<sup>39</sup> The *Sedarim* date later than the open and closed paragraphing system.<sup>40</sup>

The practices of unit delimitation found in the Greek OT books of Alexandrinus vary significantly from the practices found in the Hebrew Scriptures.

---

<sup>37</sup> Blau noted that the empty space of an interrupted line is nine characters in width (15). This overall system of spacing is “the most ancient practice” (Ginsberg, 9–10).

<sup>38</sup> Korpel, 4.

<sup>39</sup> Würthwein, 20.

<sup>40</sup> Goswell, “The Divisions of the Book of Daniel”, 95.

Like the Hebrew Scriptures, the OT books in Alexandrinus make use of spacing (between units of text rather than words) and, less commonly, the *paragraphus* mark. But this usage more closely reflects the use of these same features in Greek manuscripts (described in the next section). Thompson was of the opinion that the scribes of Alexandrinus did not understand the purpose of the *paragraphus* mark:

The ancient system of dividing paragraphs by inserting between the first words of the lines a wedge or horizontal stroke became unnecessary when large initial letters came into use. But the scribes concurrently with the use of the large letters continued to copy mechanically the paragraph marks, although the positions in which they placed them prove that they did not understand their meaning.

In this MS. the sign in common use is 7, less frequently a horizontal line, placed in the left-hand margin. When at the foot of a column, 7 is also often below the level of the last line, in a position which most nearly represents its ancient use. But the scribes seem generally to have thought that these signs belonged to the line above which, and not to the line below which, they were inserted, or, in other words, that they marked the beginning of a paragraph and not the close of one. They are accordingly very frequently found standing above the large initial letters of the paragraphs. They even take this position at the beginning of a Book, the first large letter being accompanied by the sign. From this latter fact it might be inferred that in the archetype such Books and those which immediately preceded them were written continuously without any other mark of severance than the paragraph sign. Such may have been the case in certain instances, though it is probable that the sign was more generally attached by later scribes as a meaningless ornament.<sup>41</sup>

The *paragraphus* mark occurs infrequently in the OT, in the 7-shaped form used in the NT; in the Psalms, a modified *paragraphus* (with an S-shaped tail) serves as a lower ornament to the marginal Psalm numbers. Additionally, the rudimentary punctuation found in Greek manuscripts is also present in the OT books. The punctuation marks used in the OT are also present in the NT and are discussed in detail in the next section.

Several of the OT books in Alexandrinus have been marginally marked with section numbers, including: Deuteronomy, Joshua, 1 Kings, 2 Kings, Malachi, Isaiah,

---

<sup>41</sup> *Facsimile*, 1:10.

and Song of Songs; the Greek section numbers in Genesis were added by Patrick Young. While a full description of the system of unit delimitation in the OT books is outside the scope of this study, a few observations are easily made. First, there are many more divisions in the Greek text than in the Hebrew text of *BHS* (as indicated by *ekthesis* and/or spacing), but the section numbering may be loosely related to the unit division in the Masoretic text. For example, in Deuteronomy 1:1–2:1 the following is observed:

**Table 5.3: Unit delimitation in Deuteronomy**

Verse	<i>Ekthesis</i>	Space	Section (A)	<i>BHS</i>
1:1	X		(Λ)	[κ]ϐ
1:3	X	X		
1:6	X			
1:9	X	X	Β	Space
1:9+		X		
1:11		X		
1:14		X		
1:15	X	X		
1:16	X	X		
1:19	X	X	Γ	Space
1:22	X	X		
1:23	X			
1:24+		X		
1:29	X	X		
1:32	X	X		
1:33+	X			
1:34	X	X		Space
1:37		X		
1:39	X	X		
1:40	X	X	Δ	
1:42	X	X		
1:43	X	X		
2:1	X	X	Ε	ϐ at end

This system of dividing the text in to sections trails off shortly, however. Two more sections follow (Ζ at Dt 2:7+ and Ζ at 2:14) and neither one of these sections

matches a corresponding unit edge in *BHS*.<sup>42</sup> Whatever the origin of the section numbers, the general paragraphing of the OT books does not appear to follow that of the MT.

In the OT books another form of unit identification is present in the Psalms, which are numbered; a table of *periochae* prefixes the Psalms and each summary numbered. As Wettstein lamented in his description of the scribal lack of diligence, in the *periochae* at Psalm 76 there is an error in the numbering that continues all the way to Psalm 93; the scribe, unwilling to blot out or correct the preceding erroneous numbers, merely assigns two Psalms the same number (Ϟ occurs twice) and moves on.<sup>43</sup>

#### Unit Division in Greek Manuscripts

While Greek literary texts did make use of some punctuation, spacing (between units of text, not between words), and indication of some divisions in a text (such as a change of speakers), the continuous Greek script remained largely unpopulated with

---

<sup>42</sup> Notation that looks similar to a section number appears on V1.F124 to the left of the first column, possibly reading **IN**.

<sup>43</sup> Wettstein, *Prolegomena ad Novi Testamenti Graeci* (Amsterdam: R. & J. Wetstenios & G. Smith, 1730), 11; see V3.F11a.

these features.<sup>44</sup> Additionally, where rudimentary punctuation does occur, Greek scribes were not uniform in how they used these signs.<sup>45</sup>

In contrast to Greek literary texts, Greek biblical texts made use of many “reader’s helps”—from rudimentary punctuation and breathing marks to structural markers of larger sense units—that indicate a particular desire to facilitate the (typically public) reading of the texts.<sup>46</sup> From the earliest extant Greek biblical manuscript witnesses, scribal devices used for unit delimitation indicate a very early Christian exegesis of the NT texts and, as Hurtado suggests, “probably also reflect something of how these texts were read liturgically, by about 200.”<sup>47</sup> Some of these helps are present in both Greek NT texts and Greek Jewish texts: the use of spacing for section division, use of paragraph markers (typically a horizontal *paragraphus* mark) to indicate the end of a unit of text, and the use of *ekthesis* to indicate the beginning of new sections.<sup>48</sup>

---

<sup>44</sup> L. D. Reynolds and N. G. Wilson, *Scribes and Scholars* (Oxford: Oxford University Press, 1968), 4. This is in contrast to the more frequent use of punctuation by the Romans in Latin literature (see, for example, M. B. Parkes, *Pause and Effect: An Introduction to the History of Punctuation in the West* [Berkeley: University of California Press, 1993], 9–10); as Seneca comments in a letter, *nos etiam cum scribimus interpungere adsuevimus* (Ep. 40:11). Meyer asserts that it was a habit of Roman literature—but not Greek—to punctuate texts to assist with reading them aloud (Elizabeth A. Meyer, *Legitimacy and Law in the Roman World: Tabulae in Roman Belief and Practice* [Cambridge: Cambridge University Press, 2008], 82–83).

<sup>45</sup> E. G. Turner, *Greek Papyri: An Introduction* (Princeton: Princeton University Press, 1968), 184.

<sup>46</sup> Larry W. Hurtado, *The Earliest Christian Artifacts* (Grand Rapids: Eerdmans, 2006), 177–178; Harry Y. Gamble, *Books and Readers in the Early Church* (New Haven: Yale University Press, 1995), 74; cf. Parkes, 19.

<sup>47</sup> Hurtado, *The Earliest Christian Artifacts*, 181.

<sup>48</sup> Emanuel Tov, *Scribal Practices and Approaches Reflected in the Texts Found in the Judean Desert* (Leiden: Brill, 2004), 303–315.

### *Punctuation Used in Delimitation*

Various symbols of punctuation utilized for unit delimitation were used in classical and Hellenistic Greek manuscripts. Typically ascribed to Aristophanes of Byzantium (c. 260 BC) and later described by the Hellenistic grammarian Dionysius Thrax (170 BC-90 BC) in his *Τέχνη γραμματική*<sup>49</sup> and much later by the fourth century Diomedes in his *De Oratone et Partibus Orationis et Vario Genere Metrorum libri III*,<sup>50</sup> these symbols include:<sup>51</sup>

1. στιγμὴ τελεία or high point (·), which functioned as a full stop;
2. στιγμὴ μέση or medial point (·), which served various functions, frequently as a comma;
3. ὑποστιγμὴ or low point (.), which functioned as a shorter pause or semicolon;

---

<sup>49</sup> Dionysius Thrax, *Dionysii Tracis: Ars Grammatica*, Grammatici Graeci, ed. Gustav Uhlig, vol. 1 (Leipzig: B. G. Teubner, 1883), 7–8. Dionysius only mentions the first three types of punctuation stop delimiters: “στιγμαὶ εἰσι τρεῖς· τελεία, μέση, ὑποστιγμή. καὶ ἡ μὲν τελεία στιγμὴ ἐστι διανοίας ἀπηρτισμένης σημεῖον, μέση δὲ σημεῖον πνεύματος ἕνεκεν παραλαμβανόμενον, ὑποστιγμή δὲ διανοίας μηδέπω ἀπηρτισμένης ἀλλ’ ἔτι ἐνδεοῦσης σημεῖον. τίνι διαφέρει στιγμὴ ὑποστιγμῆς; χρόνῳ· ἐν μὲν γὰρ τῇ στιγμῇ πολὺ τὸ διάστημα, ἐν δὲ τῇ ὑποστιγμῇ παντελῶς ὀλίγον” (§4).

Current scholarship believes that Dionysius’ grammar, which became an authoritative grammatical text, may have been revised up through the Byzantine period, as the Greek language changed over time (see the discussions in Vivien Law and Ineke Sluiter, eds., *Dionysius Thrax and the Technē Grammatikē* [Münster: Nodus Publikationen, 1995]). In his contribution to the aforementioned volume, N. E. Collinge notes the curiosity of the *Τέχνη* listing three στιγμὴ and then asking what differentiates στιγμὴ from ὑποστιγμὴ; his suggestion is that “this muddle may arise from a later insertion of a middle term into an original duality (the breath-pause explanation fits in badly); then the necessarily renamed *teleiā* is not so called on second mention” (57). Regardless, even revised versions of his grammar pre-date Codex Alexandrinus and remain applicable to this discussion.

Considering ancient grammars, Porter reminds the modern reader: “Certainly their abilities to use the language far exceeded those of modern scholars, yet their efforts at describing their own language were, unfortunately, rudimentary and even in places misleading” (Stanley E. Porter, *Verbal Aspect in the Greek of the New Testament, with Reference to Tense and Mood* [New York: Peter Lang, 1989], 22).

<sup>50</sup> Hermann Hagan, *Grammatici Latini* (Leipzig: B. G. Teubner, 1870), 230–1.

<sup>51</sup> F. Blass and A. Debrunner, *A Greek Grammar of the New Testament and Other Early Christian Literature*, trans. Robert W. Funk (Chicago: University of Chicago Press, 1961), 10; Michaelis, 511.

4. the double point (:), used to indicate the end of a sentence;<sup>52</sup>
5. the apostrophe, diastole, or syllable/consonant divider ('), used to divide double consonants and delimit words with endings uncommon to Greek.<sup>53</sup>

These are the symbols under consideration during the examination of the Gospels of Codex Alexandrinus—other punctuation marks, such as the comma (,), the interrogation mark (;), and the lozenge (⬠), were not introduced until the eighth and ninth century.<sup>54</sup>

In the Gospels, Alexandrinus makes use of several methods of unit delimitation. At the sentence level, the high and medial points are used with great frequency; additionally, the syllable divider or “hook” (') is used with a variety of words—both at the end of words and to divide consonants in the middle of words. Above the sentence level, unit division is accomplished in Alexandrinus through the use of spacing and *ekthesis*, or by combining spacing, *ekthesis*, and variations of the *paragraphus* mark. Two additional forms of delimitation which may have an impact on how the texts are paragraphed are use of the Eusebian apparatus and the division

---

<sup>52</sup> Thompson refers to the fourth century BC Artemisia papyrus to show very early use of the double point (*Greek and Latin Palaeography*, 63). The double point may also be used to mark the end of a paragraph in Paris Papyrus 49 (dated to 160 BC).

<sup>53</sup> Burkitt referred to this device being “often inserted after ‘barbarous’ Proper Names, as in such sentences as **ΑΒΡΑΑΜ' ΕΓΕΝΝΗΣΕΝ**” (Cuthbert Lattey and F. C. Burkitt, “The Punctuation of New Testament Manuscripts,” *JTS* 29 [1928]: 397), but the use of this symbol goes beyond delimiting the end of proper names. At times, the sign is also used in the middle of completely ordinary words; Gardthausen noted its occurrence in a papyrus from AD 233 in such words as **ΟΦΘΑΛ' ΜΟΥ**, **ΣΠΕΡ' ΜΑΤΩΝ**, and **ΚΑΡ' ΠΟΝ** (Viktor Emil Gardthausen, *Greichische Palaeographie* [Leipzig: B. G. Teubner, 1879], 272). Gignac notes that this diacritical mark is used “mainly from the third century on” and that “although two-thirds of the occurrences of this diacritical mark separate a nasal (written irregularly γ or ν) from a following velar stop, and others separate two different consonants, the diacritical mark is also used to separate two identical consonants which are frequently simplified” (Francis Thomas Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods* [Milan: Istituto editoriale cisalpino-La goliardica, 1976], 162); likewise, Tiziano Dorandi, “Punctuation,” in *BNP*.

<sup>54</sup> Metzger, *Manuscripts*, 32; Thompson, *Greek and Latin Palaeography*, 63; cf. Parkes, 36.



of the Gospels into chapters using *kephalaia* (chapter divisions) and *titloi* (the titles of those chapters) discussed earlier.

Punctuation using the high and medial points (στιγμὴ τελεία and στιγμὴ μέση) is very common throughout the Gospels. Scrivener considered the punctuation to be original to the manuscript (“which no later hand has meddled with”),<sup>55</sup> and Cowper assessed the pointing to be “to a great extent quite arbitrary” and most often used as “the Greek semicolon”—though it is “often quite misplaced” and “found between words grammatically connected, and even in the middle of a word.”<sup>56</sup> Regardless, often the points serve as full stops. But they also serve as pauses in lists of items, concepts, or people, much like the modern comma. Examples include:

ΣΙΜΟΝΟΣ·ΚΑΙ ΑΝΔΡΕΟΥ ΜΕΤΑ ΙΑΚΩ  
ΒΟΥ·ΚΑΙ ΙΩΑΝΝΟΥ· (from Mark 1:29)

ΕΣΘΙΕΙ·ΚΑΙ ΠΙΝΕΙ· (from Mark 2:16)

ΕΣΩΘΕΝ ΓΑΡ ΕΚ ΤΗΣ ΚΑΡΔΙΑΣ ΤΩ  
ΑΝΘΡΩΠΟΥ ΟΙ ΔΙΑΛΟΓΙΣΜΟΙ ΟΙΚΑΚΟΙ  
ΕΚΠΟΡΟΥΝΤΑΙ· ΜΟΙΧΕΙΑΙ ΠΟΡ  
ΝΙΑΙ· ΦΟΝΟΙ· ΚΛΟΠΑΙ· ΠΛΕΑΝΕΣΙΑΙ  
ΠΟΝΗΡΙΑΙ· ΔΟΛΟΙ· ΑΣΕΛΓΙΑ· ΟΦΘΑΛ  
ΜΟΣ ΠΟΝΗΡΟΣ· ΒΛΑΣΦΗΜΙΑ·  
ΥΠΕΡΗΦΑΝΕΙΑ· ΑΦΡΟΣΥΝΗ· ΠΑΝ (from Mark 7:21)

This punctuation even occurs in the chapter lists that precede the Gospels (see below)—for example:

<sup>55</sup> Scrivener, *Plain Introduction*, 3d ed., 96.

<sup>56</sup> B. H. Cowper, *Codex Alexandrinus. H KAINH DIAΘΗKH. Novum Testamentum graece ex antiquissimo codice alexandrino a C. G. Woide olim descriptum: ad fidem ipsius codicis* (London: David Nutt and Williams & Norgate, 1860), vii–viii.

ΠΕΡΙΤΩΝ ΠΕΝΤΕΛΡΤΩΝ·ΚΑΙ ΤΩΝ ΔΥΟΪΧΘΥΩΝ in the

*kephalaia* list for the Gospel of John.

The diastole or syllable divider is used somewhat frequently in the Gospels, but with some inconsistency. First, the mark itself varies in shape from a hook much like an apostrophe (') to a high point (˘) to a tick mark ('). Second, although it is most often placed after a letter, sometimes it occurs over a letter. Third, the mark is not used consistently with words that one would expect to be marked; for example, ΦΑΡΑΞ (V4.F22a.c2.r24) is not marked for having an unusual terminal letter. Additionally, the mark appears to be used in some cases of elision<sup>57</sup> and at the end of words that terminate with uncommon Greek letters; even one *nomen sacrum* is tagged with this diacritical mark.<sup>58</sup>

In the extant portion of Matthew, words that are terminated with the divider are: ΛΛΛ', ΓΑΡ' (quite unusual, for such a common word), ΟΥΚ', ΣΑΡΞ', and ΨΔΟΡ'.

In Mark there is a wider sample of words so marked: ΛΛΛ' (preceding a vowel), ΘΥΓΑΤΕΡ', ΒΗΔ' ΣΑΪΔΑΝ, ΟΥΚ', ΒΗΘ' ΣΑΪΔΑΝ, ΠΥΡ', ΣΚΩΛΗΞ', ΒΗΘ' ΦΑΓΗ, ΟΥ', ΔΑΝΙΗΛ', ΣΑΡΞ', ΕΞ', ΕΙΣ', and ΛΛΕΚΤΩΡ'.

---

<sup>57</sup> This practice was well-established by the time Alexandrinus was produced; Turner cites the earliest use of the apostrophe to mark elision at the second century BC (*Greek Manuscripts*, 9). According to Turner, the proper use of the mark "is to separate syllables and words" (*Greek Manuscripts*, 13).

<sup>58</sup> Thompson makes similar observations for this practice in the books of the OT (*Facsimile*, 1:11).

In Luke the diastole occurs in the following words: **ΕΠΕΙΔΗΠΕΡ'** ,  
**ΕΛΙΣΑΒΕΤ'** , **ΗΛΙΟΥ'** , **ΝΑΖΑΡΑΘ'** , **ΙΩΣΗΦ'** , **ΔΑΔ'** ,  
**ΜΑΡΙΑΜ'** , **ΑΒΡΑΑΜ'** , **ΒΗΘΛΕΕΜ'** , **ΣΩΤΗΡ'** , **ΣΥΜΕΩΝ'** ,  
**ΦΑΝΟΥΗΛ'** , **ΝΑΖΑΡΑΤ'** , **ΚΑΙΑΦΑ'** , **ΣΑΡΞ'** , **ΠΥΡ'** ,  
**ΚΑΠΕΡΝΑΟΥΜ'** , **ΓΕΝΝΗΣΑΡΕΤ'** , **ΑΝΗΡ'** , **ΛΑΙΛΑΨ'** ,  
**ΛΕΓΕΩΝ'** , **ΟΥΚ'** , **ΘΥΓΑΤΕΡ'** , **ΚΑΤ'** , **ΒΗΘ' ΣΑΪΔΑΝ** , **ΓΑΡ'** ,  
**ΒΗΔ' ΣΑΙΔΑ** , **ΒΕΕΛΖΒΟΥΛ'** , **ΒΕΕΛ' ΖΕΒΟΥΛ'** (divided), **ΕΚ'** ,  
**ΑΒΕΛ'** , **ΣΙΛΩΑΜ'** , **ΕΞ'** , **ΙΣΑΑΚ'** , **ΦΡΕΑΡ'** , **ΠΕΡ'** , **ΛΩΤ'** ,  
**ΩΣΠΕΡ'** , **ΒΗΘ' ΦΑΓΗ** , **ΘΡΙΖ'** , **ΑΤΕΡ'** , and **ΜΕΘ'** . Spohn records an  
occurrence of ' **Λ** ' at Luke 10:24,<sup>59</sup> but I cannot see it in either the facsimiles or the  
digital images.

In John, the diastole occurs only in: **ΛΑΛ'** , **ΣΑΡΞ'** , and **ΑΝΗΡ'** .

Because punctuation is difficult to distinguish (from blemishes, foxing, etc.)  
and record with great certainty from the available images of the manuscript, with  
caution I will reference Woide on a final possible use of a mark for word/syllable  
division. Noting the various uses of the syllable divider, Woide compiled a list of  
words in the Gospels that were divided across a row boundary and marked in a way  
similar to the use of a modern hyphen. Noting that verbs with prepositional prefixes  
occasionally had their prefixes delineated from the verb with some kind of mark,  
Woide bifurcated the list into words which were divided and marked at the end of a

---

<sup>59</sup> Spohn, 24.

line and words that were divided after a prepositional prefix at the end of a line. His list follows, with my observations recorded in notes:<sup>60</sup>

**Table 5.4: Woide's list of divided words in the Gospels**

Verse	Reference	Word <sup>61</sup>
Matt 28:5	V4.F5a.c1.r48	ΛΓ- (ΓΕΛΟΣ) <sup>62</sup>
Mark 10:46	V4.F13b.c2.r5	ΒΛΡ- (ΤΙΜΑΙΟΣ) <sup>63</sup>
Luke 11:18	V4.F30b.c1.r2	ΒΕΕΛ- (ΖΕΒΟΥΛ) <sup>64</sup>
Luke 13:11	V4.F32b.c1.r26	ΕΧΟΥ- (ΟΛ) <sup>65</sup>
Luke 15:23	V4.F34a.c2.r14	ΕΝΕΓ- (ΚΑΝΤΕC) <sup>66</sup>
Mark 4:39	V4.F8b.c1.r25	ΟΛ' (ΝΕΜΟΣ)
Luke 3:14	V4.F22b.c1.r12	Ο' (ΥΩΝΙΟΙC) <sup>67</sup>
John 3:6	V4.F43b.c1.r50	ΟΛΡ· (ΚΟΣ) <sup>68</sup>
Mark 9:28	V4.F12.c2.r48	ΕΚ- (ΒΑΛΕΙΝ) <sup>69</sup>
Luke 9:40	V4.F28b.c2.r5	ΕΚ- (ΒΑΛΩCΙΝ) <sup>70</sup>
Luke 8:53	V4.F27b.c2.r20	ΚΑΤ- (ΕΓΕΛΩΝ) <sup>71</sup>
Luke 23:5	V4.F40a.c1.r5	ΕΠ- (ΙCΧΥΟΝ) <sup>72</sup>
Mark 3:19	V4.F7b.c1.r35	ΠΑΡ- (ΕΔΩΚΕΝ) <sup>73</sup>

<sup>60</sup> Spohn, 26–27.

<sup>61</sup> The division of words is indicated via parenthesis; for example: αγ- (γελος) would indicate a division of the word αγγελος in which αγ- appears at the end of a row, and γελος is continued on the next line.

<sup>62</sup> Woide has depicted the mark as a dash beside the *gamma*, but it sits high above the *gamma* to the right and appears more like a dot or a tick mark. The same syllable division occurs on V4.F2.c2.r36 in Matthew 26 and, though Woide does not record it, the same dot or tick mark appears after the first *gamma* there as well. The same division occurs at John 12:29 and 20:12 with no such marking. It may be worth noting that in the entirety of the Gospels, only 23 lines terminate with a *gamma*.

<sup>63</sup> Woide has depicted the mark as a dash beside the *rho*, but the mark is high and to the right and shaped more like a dot or an apostrophe.

<sup>64</sup> Woide has depicted the mark as a dash beside the *rho*, but the mark is a high point.

<sup>65</sup> No connecting mark of any kind is apparent in the facsimiles.

<sup>66</sup> The mark is actually a high point (or possibly a short line) above and to the right of the *gamma*.

<sup>67</sup> The mark is a high point, not a hook.

<sup>68</sup> The first syllable occurs on the final line of the first column, the last syllable occurs on the first line of the second column.

<sup>69</sup> The mark appears as a high point or tick mark.

<sup>70</sup> The mark appears as a high point, though it is half a character away from the *kappa* and near a damaged portion of the vellum that appears discolored in the facsimiles.

<sup>71</sup> The mark appears as a high point or apostrophe.

<sup>72</sup> The mark appears as a high point; the *iota* on the next line is enlarged and marked with diaeresis.

<sup>73</sup> The mark appears as a high point.

If these marks truly represent a sign that a word has been divided across a row boundary, I echo the footnote in Spohn's edition: *Quod in alio Codice non facile reperitur*.<sup>74</sup> Without physical access to the manuscript—something granted to Woide and his contemporaries—one is inclined to lend more weight to Woide's direct observation since it is difficult to evaluate the record of some of these marks. However, because the indication of word division across rows is a much later invention, more probable avenues of explanation must be explored. For example, it may not be surprising to place such a mark in the words to indicate where the prepositional prefix has been separated from its verb. But without more direct means of examination, it is not productive to speculate.

### *Spacing, the Paragraphus, and Ekthesis*

Another common way of delimiting units of text is through the use of blank space in a line of continuous script. First, spacing may be used to separate individual words within a sentence. This usage of a space is found in Hebrew (e.g., in the Qumran biblical MSS) but is rare in the Greek literary and non-literary papyri, and is so elementary as to be "the last form of assistance" provided in Greek manuscripts.<sup>75</sup> The practice in Hellenistic Greek texts, as already mentioned, is mechanically similar to that of Hebrew non-documentary texts: line division through spacing might occur interrupting the middle of a line or at the end of a line.<sup>76</sup>

---

<sup>74</sup> Spohn, 26.

<sup>75</sup> Frederic G. Kenyon, *The Palaeography of Greek Papyri* (Oxford: Clarendon Press, 1899), 27. Turner asserted that "a space deliberately left blank is also to be considered as a mode of punctuation" (*Greek Manuscripts*, 10).

<sup>76</sup> Blau noted this similarity in 1913, demonstrating that the practice was (at that time) attested to the fourth century BC in a copy of "The Persians" by Timotheos of Miletus (15).

Spacing, in combination with other features such as the *paragraphus*, seems to be the means by which paragraph division was accomplished in ancient Greek texts from Aristotle to the NT era.<sup>77</sup> The use of the *paragraphus*—most typically drawn as a horizontal marking in or at the left margin of the text—varied among and even within a literary genre. Within dramatic texts, the *paragraphus* was most commonly used to indicate a change of speaker.<sup>78</sup> In lyric texts the *paragraphus* was used to delimit metrical groups, in hexameter texts it was occasionally used to delimit sections of text.<sup>79</sup> “In documents, it is likewise employed, though rarely, to separate sections or the members of a list, but fairly regularly a paragraphus will divide the main text from the *subscriptio*.”<sup>80</sup> Regardless of the varying uses of the delimiter, the *paragraphus*, coupled with a slight space in the text, is the earliest system of delimitation in Greek texts and is found in some of the earliest extant papyri (dating to at least the third century BC).<sup>81</sup>



**Figure 5.1: The various *paragraphus* marks used in the Gospels of Alexandrinus**

In (non-dramatic) literary prose texts, the typical use of the *paragraphus* was to mark the end of a sentence, often with the concomitant use of other delimiters such as spacing, dashes, or points of some kind. After surveying papyrological use of *paragraphoi* in Pack<sup>2</sup>, Johnson concludes that this redundant use of the

<sup>77</sup> Stanley E. Porter, “Pericope Markers and the Paragraph,” in *The Impact of Unit Delimitation on Exegesis*, ed. Raymond de Hoop, Marjo C. A. Korpel, and Stanley E. Porter (Leiden: Brill, 2009), 183.

<sup>78</sup> William A. Johnson, “The Function of the Paragraphus in Greek Literary Prose Texts,” *ZPE* 100 (1994): 65; Thompson, *Greek and Latin Palaeography*, 61; “παράγραφος,” LSJ, 1306.

<sup>79</sup> Johnson, “The Function of the Paragraphus,” 65.

<sup>80</sup> Johnson, “The Function of the Paragraphus,” 65.

<sup>81</sup> Kenyon, *The Palaeography of Greek Papyri*, 27.

*paragraphus* preceded a secondary usage to distinguish between full stops (punctuation with *paragraphus*) and lesser stops (punctuation alone).<sup>82</sup> Once this distinction was made, the *paragraphus* was used to mark the end of a unit of text, not the beginning of a new unit.<sup>83</sup>

Often combined with a *paragraphus*, *ekthesis* is the extrusion of the first character of a row of letters into the left margin of the text, as defined by the column ruling.<sup>84</sup> In Alexandrinus, this character is nearly always enlarged as well. This character serves as the visual cue for the beginning of a new unit of text, though it need not be the first character of the unit. When a new unit commences in the midst of a line (typically with spacing separating the sense-unit) the first character of the next row will be enlarged and extend into the margin. Cowper commented that the purpose of the enlarged letters and *ekthesis* is “to call attention to the commencement of a new paragraph” and also “to save space, as the lines must have stood further apart wherever it occurs.”<sup>85</sup>

Delimitation of units of text larger than the sentence appears in two forms in Alexandrinus. In the first (and more common) form, *ekthesis* is combined with spacing to delineate smaller units of text; if the layout of the text eliminates the need for spacing (e.g., when a row of text naturally ends at the right edge of a text column), then no spacing is used. In these small units, spacing consists of either

---

<sup>82</sup> Johnson, “The Function of the Paragraphus,” 66. In his final analysis, the *paragraphus* was used “primarily to assist with reading aloud” (68).

<sup>83</sup> Thompson, *Greek and Latin Palaeography*, 61.

<sup>84</sup> *Ekthesis* was often used to mark the start of a new paragraph in official documents, commentaries, and lists (Tiziano Dorandi, “Punctuation,” in *BNP*).


<sup>85</sup> Cowper, vii. See his example from MS Harleian 5731.

adding a space in the middle of a line of continuous text or ending a line before the right edge of the text column. For example:

ΤΟΥ ΕΙΣ ΠΑΝΤΑ ΤΟ ΠΟΝΤΗ ΣΠΕ  
ΡΙΧΩΡΟΥ ΑΝΑΣΤΑΣ ΔΕ  
ΕΚ ΤΗΣ ΣΥΝΑΓΩΓΗΣ ΟΙΣ ΕΙΣ· ΗΛ<sup>86</sup>

and

Κ ΜΕΝ ΕΝ ΚΩΦΟΣ·  
ΚΑΙ ΕΓΕΝΕΤΟ ΩΣ ΕΠΛΗΣΘΗΣΑΝ<sup>87</sup>

In the second and less common form of unit division, the *paragraphus* symbol is added to the spacing/*ekthesis* combination; at this level the *paragraphus* either appears once, at the left margin of the text, or twice, appearing at the left margin of the text and also at the first word of the new unit. The use of a second, in-line *paragraphus* is highly inconsistent. In many instances, the marginal *paragraphus* appears as a 7-shaped symbol,<sup>88</sup> while the in-line *paragraphus* may be reduced to a horizontal bar (–). Additionally, the marginal *paragraphus* is sometimes shaped like a plus sign (+) or a slanted cross (†). In the Gospel of Luke, two additional symbols are used one time each: the horizontal bar (–) and a symbol much like a dotted cross: (  ).

The same symbol used for the 7-shaped *paragraphus* is used elsewhere in the manuscript as something other than a paragraph divider. It is used beneath both Eusebian section numbers and chapter numbers both in the side and upper margins of

<sup>86</sup> See V4.F23b.c1.r28–30 (Luke 4:37–38).

<sup>87</sup> See V4.F20a.c2.r34–35 (Luke 1:22–23).

<sup>88</sup> Thompson refers to this symbol as a *κορωνίς* (*Greek and Latin Palaeography*, 61), but that appears to be a misnomer (cf. the form and use of the *coronis* before the fourth century AD, as discussed in Chapter 4). Gardthausen identifies the *κορωνίς* as a ' symbol, but among ninth and tenth century minuscule texts (279).



the text. It is perhaps for this reason that Thompson, as already mentioned above, suggested that the *paragraphus* is used in Alexandrinus “generally in anomalous positions” and that this is “an indication that the scribes of the day had already begun to forget the meaning and proper use of the mark.”<sup>89</sup>

### *Diaeresis (or Trema)*

Words beginning with iota or upsilon are commonly marked by the scribes of Alexandrinus with a diaeresis (or trema), either in the form of a pair of dots (e.g. **ἴ**) or by means of a very short supralinear mark where perhaps the dots have been slurred.<sup>90</sup> The mark is also used to indicate a vowel that is not to be joined into a diphthong with the preceding vowel (e.g. **ΒΗΘ' ΟΛΙΔΑΝ**). This latter use was considered to be its “organic” (or proper) use, labeling the former as “inorganic”—for the “proper use of the trema is to separate vowels.”<sup>91</sup> At times this latter practice also extends to vowel pairs that do not form diphthongs, for example: a diaeresis is placed over the iota in **ΠΡΩἶ** (V4.F15a.c2.r35), **ΕΛΩἶ** (V4.F15b.c2.r40–41), and **ΔΙἶΕΧΥΡΙΖΕΤΟ** (V4.F39.c1.r53). Occasional variations from this practice are found in the Gospels. For example: a diaeresis is placed over neither a leading vowel nor a pair of vowels in **ΕΞἶΚΤΑΝΤΟ** (V4.F22.c2.r30). Additional examples include a diaeresis placed over a leading eta in **ἩΜΕΛΛΕΝ** (V4.F28b.c1.r14),

<sup>89</sup> Thompson, *Greek and Latin Palaeography*, 62.

<sup>90</sup> Thompson recorded similar behavior in the books of the OT (*Facsimile*, 1:11); Cowper made a similar assessment (viii).

<sup>91</sup> Turner, *Greek Manuscripts*, 12.

over a leading omicron in **ὈΠ** (V4.F39a.c2.r38), and over omega in **Ω** (V4.F41a.c1.r42).<sup>92</sup>

While there are no accents or breathing marks in the Gospels of Alexandrinus,<sup>93</sup> an additional form of word/letter division occurs in the Gospels that fills a role somewhere between that of the diaeresis and the breathing mark. Rarely, a single dot or stroke is used to indicate word boundaries, for example:

**ὈΟΦΘΑΛΜΟΣ** (V4.F30b.c2.r23) or **Ο' ΟΥΚ** (V4.F31a.c2.r16).<sup>94</sup> When the mark is used this way, it is almost always to indicate a masculine or feminine nominative article.<sup>95</sup> The most unusual instance of this practice is found at V4.F35.c1.r48, where several such markings occur in sequential words:

**ΗΗΜΕΡΑΟΥΙΟΣ.**

### *Quotations*

In manuscripts of the Early Byzantine period the most common means of signifying quotations was the use of the *diple*,<sup>96</sup> a wedge-shaped mark (>) placed in the left margin of a text.<sup>97</sup> At the beginning of the seventh century, Isidore of Seville

<sup>92</sup> Woide records instances of this practice throughout the NT (Spohn, 24–26). His observations, while made from the actual manuscript, do not appear to be comprehensive—I have recorded far more instances in the Gospels alone.

<sup>93</sup> Note, however, that some breathing and accent marks have been added in the OT by a much later hand. See, for example, the marks added to V1.F253a (1 Chronicles 15:7–16:4).

<sup>94</sup> The latter example might just as easily fall under the role of the word divider.

<sup>95</sup> Cowper apparently found this practice confounding, stating that “Over some letters as *eta* and *omega* a line is sometimes drawn without any apparent meaning. This horizontal line is the usual sign of contraction and as such is of course very common” (viii).

<sup>96</sup> Or διπλῇ ἀπερίστικτος, the “un-dotted” *diple*.

<sup>97</sup> Raymond Clemens and Timothy Graham, *Introduction to Manuscript Studies* (Ithaca: Cornell University Press, 2007), 86–87; Thompson, *Greek and Latin Palaeography*, 66; Turner, *Greek Manuscripts*, 17.

noted that the *diple* was used to indicate quotes from the Bible (*Orig.* 1.21),<sup>98</sup> though in practice it was used more widely.<sup>99</sup> The scribes of Alexandrinus made use of three forms of the *diple*: the simple wedge ( > ) and the dotted wedge ( >̣ ) and the double dotted wedge ( >̣̣ ). While Isidore noted that the first dotted form (called the *diple* *περὶ στίχου*) functioned first for Leogoras of Syracuse as a means of distinguishing Mount Olympus from heaven (Olympus) in Homeric verse (*Orig.* 1.21.14), the scribes of Alexandrinus treat all three forms as a simple *diple*.

In the Gospels of Alexandrinus the *diple* is placed beside the first and subsequent rows of quoted OT text. Additionally, each scribe appears to have been mindful of treating the quoted text as a unit, squeezing the last few letters of a quote onto the end of an already crowded row of text or providing a generous space after a quoted section. This suggests that the *diple* notation is coeval to the production of the manuscript and that the scribes had a keen awareness of where quotes began and ended. The OT quotes so marked in the Gospels are:

**Table 5.5: Marked OT quotations in the Gospels**

Folio	Passage	Form <sup>100</sup>	Quotation
V4.F13a.c1	Mark 10:7–9	2	Genesis 2:24
V4.F14a.c1	Mark 11:9–10	2	Psalms 118:25–26
V4.F14a.c1	Mark 11:17	2	Isaiah 56:7
V4.F14b.c1	Mark 12:10–11	2	Psalms 118:22–23
V4.F15a.c1	Mark 12:29–30	2	Deuteronomy 6:5; Joshua 22:5
V4.F15a.c1	Mark 12:36	2	Psalms 110:1
V4.F22a.c2	Luke 3:4–6	1	Isaiah 40:3–5
V4.F23a.c1	Luke 4:10–11	1	Psalms 91:11–12

<sup>98</sup> Isidore, *Isidori Hispalensis Episcopi Etymologiarum Sive Originum Libri XX*, vol. 1, ed. W. M. Lindsay (Oxford: Clarendon, 1911).

<sup>99</sup> Classical usage of the symbol was varied as well; see Fridericus Osannus, *Anecdota romanorum de notis veterum criticis inprimis Aristarchi Homerici et Iliade Heliconia* (Geissen: I. Rickerum, 1851), 3–8; Gardthausen, 288–289.

<sup>100</sup> The forms are in the order described: form 1 = the simple *diple* (>); form 2 = the dotted *diple*; form 3 = the double dotted *diple*.

Folio	Passage	Form <sup>100</sup>	Quotation
V4.F23a.c2	Luke 4:18–19	1	Isaiah 61:1–2
V4.F26a.c1–2	Luke 7:27	1	Exodus 23:20
V4.F29b.c2	Luke 10:27–28	1	Deuteronomy 6:5; Joshua 22:5; Leviticus 19:18
V4.F37b.c1	Luke 20:17	1	Psalms 118:22
V4.F50a.c1	John 12:38	3	Isaiah 53:1
V4.F50a.c1	John 12:40	3	Isaiah 6:10
V4.F50b.c1	John 13:18	1	Psalms 41:10
V4.F54b.c1	John 19:36	[1]	Psalms 34:21

The number of OT quotations noted in the Gospels is perhaps surprisingly sparse. Many that *are* marked begin with formulaic phrases (such as “it is written” or “in order to fulfill the Scripture”), and yet numerous other OT quotations with similar formulaic phrases are *not* marked in Alexandrinus. Interestingly, the OT books most quoted in the above table are the Psalms and Isaiah; perhaps the scribes of Alexandrinus (or of its exemplar) had a greater familiarity with these books, which placed a natural limit on the number of quotations that were marked.

The beginnings and endings of the quoted sections of the OT are (as mentioned above) carefully observed, though the passages of Mark 12:29–30 and Luke 10:27–28 are noteworthy. Both passages deal with the topic of the greatest commandment and each handles the quotations in a surprising manner. In the case of the former, the quotations from Deuteronomy and Joshua are marked but not the quotation from Leviticus 19:18 that immediately follows (*αγαπησεις τον πλησιον σου ως σεαυτον*). In the case of the latter, all three passages are quoted as well as some narrative text that completes the response given by Jesus (*ειπεν δε αυτω ορθως απεκριθης τουτο ποιει· και ζηση*). Thus the scribal use of the *diple* in the Gospels is generally careful, but not without error.

Comparatively, only the simple *diple* is used throughout the rest of the NT books to signify both OT and NT quotations—NT quotations occur at 1 Timothy 5:18 (V4.F120b; quoting Deuteronomy 25:4 and Luke 10:7) and more loosely in 1 Clement.<sup>101</sup> So the variation found in the Gospels of Mark and John is unusual for Alexandrinus. Woide had used the variation as one criterion for distinguishing the first and second hands—attributing a dotted *diple* to the hand of Matthew and Mark and the plain *diple* to the hand of Luke and John—but this distinction is, as Thompson later noted, completely unfounded.<sup>102</sup> The somewhat unpredictable use of the *diple* in each of its forms in Alexandrinus is not useful for distinguishing one scribe from another. More useful is the realization that the quoted passages of Scripture found in the Gospels were fairly clearly delineated for or by the scribes of Alexandrinus, that those delineations were kept fairly strictly, and that demarcation of quoted passages in the Gospels was restricted primarily to the Psalms and Isaiah.

### ***Unit Delimitation in Each of the Gospels***

In his study of ¶<sup>66</sup> mentioned above, Martin observed that the system of delimitation present in the papyrus—which eventually propagated into W and D—was evident in Codex Vaticanus (03; B), but not in Codex Sinaiticus (01; Ⲙ) or Alexandrinus.<sup>103</sup> Prior to that, Sanders noted that in Alexandrinus “the Eusebian sections agree closely with the paragraphs”—though Alexandrinus contains many

---

<sup>101</sup> Outside the Gospels the use of the *diple* in Alexandrinus is most concentrated in Acts, Romans, and Hebrews.

<sup>102</sup> As noted before, Thompson asserted that “the dot [in the *diple*] is only an addition by the rubricator” (*Facsimile*, 4:5); for a discussion of the use of rubric by a separate hand, see Chapter 4).

<sup>103</sup> Martin, 21.

additional paragraphs.<sup>104</sup> Stanley Porter has made available lists of pericope markers found in some early papyri manuscripts.<sup>105</sup> Comparing the division markers in Alexandrinus (which follow, in turn) with the extant portions of these papyri, there is no matching pattern of division between Alexandrinus and  $\mathfrak{P}^{90}$ ;  $\mathfrak{P}^4$ ,  $\mathfrak{P}^{64}$  and  $\mathfrak{P}^{67}$ ;  $\mathfrak{P}^{66}$ ;  $\mathfrak{P}^{75}$ ; or  $\mathfrak{P}^{88}$ . By far, Alexandrinus contains more unit divisions than any of these papyri, though portions of the divisions in  $\mathfrak{P}^{75}$  bear a passing resemblance to what is found in Alexandrinus. Porter concluded from his examination of these (and a few other) papyri that pericope marking is “haphazard in the earliest manuscripts” and that they are not particularly internally consistent in their systems of unit delimitation.<sup>106</sup>

The following sections examine the practice of unit division in each of the Gospels of Alexandrinus.

## Matthew

Matthew’s Gospel suffers from the greatest lack of data in Alexandrinus. The first 24 chapters are missing, the index of *kephalaia* and *titloi* is missing (if it ever existed), few titles remain in the upper margin of the manuscript and no chapter numbers exist in the margins of the text, and the greater portion of the Eusebian section data is lost. But the extant text is long enough to offer some insights into

---

<sup>104</sup> Sanders, 16.

<sup>105</sup> Stanley E. Porter, “Pericope Markers in Some Early Greek New Testament Manuscripts,” in *Layout Markers in Biblical Manuscripts and Ugaritic Tablets*, ed. Marjo Korpel and Josef Oesch (Assen: Van Gorcum, 2005), 164–170.

<sup>106</sup> Stanley E. Porter, “Pericope Markers in Some Early Greek New Testament Manuscripts,” 172.

how the book was divided into larger and smaller units of text. In Appendix E, the unit delimitation data for the Gospel of Matthew is recorded in Table E.1.

Based on the tabular data, two types of unit division appear to be in use in this Gospel and the others. First, smaller units of text seem to be indicated more frequently through the use of spacing (when it will fit) and *ekthesis*. Spacing can either occur with the termination of a row of text prior to reaching the right margin of a column (the rest of the space being left blank) or by temporarily interrupting a row of characters. At minimum, when a previous small unit concludes at the end of a row of text, *ekthesis* indicates the beginning of a new unit despite lacking any use of spacing. Second, larger units of text (which are less frequent) make the same use of spacing and *ekthesis*, but add a *paragraphus* mark in the left margin of the text.

As Table E.1 illustrates, in the extant portion of Matthew there are 121 units delimited by some combination of *ekthesis* and/or spacing and only 15 of these units are accompanied by a *paragraphus* mark (with 2 occurrences of a double *paragraphus* marking). The use of the double *paragraphus* (one marginal mark and one in-line mark) only occurs when spacing interrupts a line of text that then continues after the space on the same row. In general, the *paragraphus* mark indicates the end of a section by being written to the left of the last row of text for that section; this is apparent when the end of a section occurs on the last row of a column of text and the marking is made at the end of that column rather than on the first line of the next column. Occasionally, however, the *paragraphus* mark is positioned higher than the last row of a paragraph's text; for example, at Matthew

26:48 the *ekthetic* **○** seems to have pushed the paragraph marker up a row of text due to lack of space, with the result that it marks the second to last row of text.

There are a few other unusual deviations in the scribal notation. At 26:51 the text has a space but no *ekthesis* or *paragraphus* mark; the space may be there to accommodate the Eusebian number pair alone. At 27:43c, which begins a new column, the enlarged character does not extrude into the margin; this could be due to a correction in the final row of the previous column. A large space follows that short sentence, followed by text (27:44) without *ekthesis* or Eusebian number pair.

When the unit division data from the preceding table is combined with the data from the Eusebian number pair positions table, some interesting mappings appear. Of the 106 minor unit delimiters (*ekthesis* with or without spacing), only 70 of them are collocated with Eusebian number pairs (that is, 66.04%). Of the 15 major unit delimiters, which occur at 25:14, 31; 26:6, 14, 17, 26, 48, 59, 69, 75; 27:3, 12, 57, 59; and 28:6, 13 of them are collocated with Eusebian number pairs (that is, 87.67%).

While there is a high correlation between Ammonian sections and major unit divisions (or paragraphs), what other linguistic features might influence this paragraphing? Porter has used modern linguistic theory in his examination of paragraphing practice among the ancients and concludes that the formalized paragraphing methods of the ancients may be determined by examining structural elements/devices:

These elements of structure include the use of initial (and sometimes final) conjunctive devices, cohesion and segmentation on the basis of a variety of features such as lexis, topicality and thematization often linked to syntax, grammaticalization of reference, and word order and referential distance. It is also pertinent to note that



the way that these features are used varies according to literary text type, so that conjunctions may have a greater role to play in narrative than in exposition, where other features, such as lexis and segmentation, may play a more important role in paragraphing.<sup>107</sup>

While there is not enough extant text in Matthew to draw any conclusions regarding the use of initial conjunctions at major unit divisions, it is useful to record this data for comparison with the other Gospels. In the extant text the major unit divisions are collocated with: 8 occurrences of *δέ* (the *δέ* at 27:57 is a correction); 3 occurrences of *καί*; 2 occurrences *τότε*; and of 1 occurrence each of *γάρ* and of asyndeton:

**Table 5.6: Initial conjunctions at major divisions in Matthew**

Major Division	Initial Conjunction	Major Division	Initial Conjunction	Major Division	Initial Conjunction
25:14	<i>γάρ</i>	26:26	<i>δέ</i>	27:3	<i>τότε</i>
25:31	<i>δέ</i>	26:48	<i>δέ</i>	27:12	<i>καί</i>
26:6	<i>δέ</i>	26:59	<i>δέ</i>	27:57	<i>δέ</i>
26:14	<i>τότε</i>	26:69	<i>δέ</i>	27:59	<i>καί</i>
26:17	<i>δέ</i>	26:75	<i>καί</i>	28:6	Ø

Returning to the correlation between Eusebian numbers and unit divisions, only 3 Eusebian numbers (out of the 85 extant in Matthew) are not collocated with either a major or minor unit delimiter (3.53%). Of those 3 numbers, 2 are accommodated in the text with spacing but no *ekthesis* or paragraph marking (at 26:51 and 27:44). The third, which occurs at Matthew 26:39c, has no accommodation whatsoever.

<sup>107</sup> Porter, “Pericope Markers and the Paragraph,” 190.

## Mark

In the Gospel of Mark, the conclusion of each major unit of text is marked with a 7-shaped *paragraphus*, except at Mark 12:13 where a slanted cross (marked as *f* in appendix Table E.2) is used instead. The use of a double *paragraphus* occurs in the Gospel of Mark as it does in Matthew—it is likewise marked with “XX” in the table.

There are 332 unit delimiters in the Gospel of Mark, consisting of 277 minor divisions (marked by *ekthesis*, with or without spacing) and 55 major divisions (*ekthesis* and a *paragraphus*, with or without spacing).<sup>108</sup> As with Matthew, minor divisions in Mark consist of use of *ekthesis* and, where appropriate, a preceding space at the end of the previous line or prior to the beginning of the new unit if occurring mid-line. Major unit divisions are additionally marked with a marginal *paragraphus*, with or without an in-line *paragraphus*; the double *paragraphus* mark occurs 8 times. In one location in the text of Mark the normal 7-shaped *paragraphus* is replaced with a cross-shaped device (12:13). Mark 13:3 should have a space, but is missing it—the scribe appears to have tried to compensate by adding a small *paragraphus* mark in the text. Mark 14:23 is strangely divided across two pages: at the bottom of the second column on V4.F16a the phrase beginning with *καὶ λαβὼν τὸν ποτεριον* (which appears to have been corrected)

ΜΟΥ·ΚΑΙ ΛΑΒΩΝ ΤΟ ΠΟΤΗΡΙΟΝ ΕΥΧΑ  
ΡΙΣΤΗC ΑΓΕΔΩΚΕΝ ΑΥΤΟΙC·

is not preceded by a space following the ΜΟΥ that ends the previous verse and it appears to terminate prematurely after ΑΥΤΟΙC, which is followed by a

<sup>108</sup> It is uncertain whether or not major divisions occur at 2:23 and 9:14.

*paragraphus*. On the next page, the verse continues (again with *ekthesis*) where the disciples drink from *it* (the cup) from the sentence above. Perhaps the correction is the cause of the awkward phrasing.

At Mark 2:23 there appears to be a *paragraphus* at the end of the first column of text despite having one concluding row of the unit begin the second column of text; an in-line *paragraphus* marks the first word of the new unit regardless.

Regarding the initial conjunctions collocated with the major unit divisions of this Gospel, all but 6 of the 56 major divisions begin with the conjunction *καί*. The distribution is: 50 *καί* (89.29%);<sup>109</sup> 4 *δέ* (at 1:32; 13:32; 15:6; 16:9) (7.14%); and 2 asyndeton (at 7:5; 8:1) (3.57%). Although Porter might take this finding to indicate something about the scribe of Mark creating major unit divisions around the conjunction *καί*, I am more inclined to attribute this to the fact that Mark happens to use *καί* more often than other conjunctions.

Of the total 332 unit divisions (both major and minor), 226 of them are collocated with Eusebian numbers (i.e., 81.23%), leaving 106 unit divisions without any association to a Eusebian number. There are only 227 extant Eusebian numbers in Mark's Gospel, so only one of them occurs (at Mark 12:35) without some kind of division marker. Of the 277 minor divisions, 187 of them are collocated with Eusebian numbers (i.e., 67.51%), leaving 90 divisions without any association to a Eusebian number. Of the 55 major divisions, 38 of them are collocated with Eusebian numbers (i.e., 69.09%), leaving 17 without any association to a Eusebian number.

---

<sup>109</sup> At Mark 10:1 note the crasis of the initial conjunction *καὶ κεῖθεν*.

Of the 20 positional variations in the Eusebian section markings for Mark's Gospel, every one of them is relocated to a minor unit division. As 226/227 (99.59%) of the Eusebian numbers are collocated with unit divisions of some kind, it is reasonable to conclude that the 20 Eusebian sections that vary in position from what is found in NA<sup>27</sup> have been attracted to the unit divisions. The one counter-example to this attraction, Eusebian section number 134 was positioned at Mark 12:35 despite unit divisions at 12:34c and 12:38, where the former is the most likely candidate for attraction.

There are two occurrences of a space without *ekthesis* or a paragraph marker. But as mentioned above, the lack of space in Mark 14:23 was perhaps a result of the apparent correction that occurred there.

## Luke

In Luke's Gospel, *paragraphus*-like markers vary among five different symbols. The most common symbol is a plus-shaped cross (+), occasionally occurring with a sub-linear mark ( $\pm$ ). The next most common mark is a slanted cross (*f*), reminiscent of the 7-shaped *paragraphus*. In one occurrence the delimiter is a horizontal bar (—) and in another a unique siglum (\*). In table E.3, the *paragraphus* marks are indicated by type, using the preceding symbols to represent them.

Of the total 566 unit divisions<sup>110</sup> in Luke's Gospel (both major and minor), 316 of them are collocated with Eusebian numbers (i.e., 55.83%), leaving 250 unit divisions without any association to a Eusebian number. Of those 566 divisions, 78

---

<sup>110</sup> This is not including Luke 1:1.

are collocated with chapter numbers (13.78%). Eusebian numbers and chapter numbers coincide in 47 locations; thus only 59.49% of the extant chapter numbers (79) are collocated with Eusebian numbers. When accounting for both Eusebian numbers and chapter numbers, of the 566 total unit divisions there are 220 that occur without any Eusebian or chapter marker (38.87%) and 348 that occur with either a Eusebian or chapter marker (61.48%).

Of the 475 minor divisions, 260 of them are collocated with Eusebian numbers (54.73%), leaving 215 minor divisions without any association to a Eusebian number. Of the minor divisions, none of them are collocated with chapter numbers and 212 of them are collocated with neither a Eusebian number nor a chapter number (44.63%).

Of the 317 extant Eusebian numbers in Luke, only 1 of them (at Luke 22:37d) occurs without being collocated with some kind of division marker (0.32%). Of the 79 extant chapter numbers in Luke (where 2 are repeated), only 1 of them (chapter 62 at Luke 18:10) occurs without being collocated with some kind of division marker (1.27%).

Chapter markers are very closely associated with large unit divisions. Of the 79 extant chapter markings in Luke, every one of them is collocated with a large unit division marking. The reverse, however, is not true. Of the 91 major unit divisions, 13 occur without any chapter division marker (14.29%). For sake of comparison, 9 major unit divisions occur without any Eusebian number or chapter marker (9.89%), and 6 are collocated with a Eusebian number alone (6.59%). The initial conjunctions that collocate with these major unit divisions show much greater variety than what is

found in Mark. Of the 91 major unit divisions in Luke, initial conjunctions are divided as follows: 8 asyndeton (8.79%); 50 *δέ* (54.95%); 29 *καί* (31.87%); 1 each of *ὅταν*, *γάρ*, *νῦν*, and *οὖν* (1.10% each).

In this Gospel there are inconsistencies in how units are formatted.<sup>111</sup> At Luke 1:1, the initial letter of the book is enlarged but does not extrude into the left margin. A space should have introduced Luke 12:40, but is lacking.<sup>112</sup> At Luke 14:18, a space occurs at the beginning of the verse, and the *ekthesis* expected to begin the following line of text instead skips a row. And while *paragraphus* markings at column breaks typically follow the preceding column (with no marker at the new/next column), at Luke 9:28 the *paragraphus* mark is instead written at the head of the new column of text.

In addition to inconsistent formatting, the scribe in Luke also divides sentences in unexpected places, setting apart sentence fragments and dependent clauses:

- At 1:55, there is a division mid-thought, such that a minor division is made of the sentence fragment:

ΤΩΑΒΡΑΑΜ·ΚΑΙΤΩΣΠΕΡΜΑΤΙΑΥΤΟΥΕΙΣΤΟΝΑΙΩΝΑ

- At 1:78b the dependent clause that follows begins a new (small) unit of text:

ΕΝΟΙΣΕΠΕΣΚΕΥΑΤΟΗΜΑΣΑΝΑΤΟΛΗΕΞΥΨΟΥΣ·

---

<sup>111</sup> A correction at Luke 1:28 removes a minor unit division; this is assumed to be intentional. If not, then a formatting issue was unintentionally introduced here as well.

<sup>112</sup> A medial point prior to the initial **ΚΑΙ** may have sought to remedy that missing space.

- In the midst of 8:2, the scribe introduces a minor unit break (space and *ekthesis*) at the name of Mary Magdalene to introduce the list of women who were healed of evil spirits and sicknesses and begins a new (major) unit at Luke 8:4.
- Jesus' assertion in Luke 13:28 is unnaturally divided such that a new unit begins with *ὅταν ὀψησθε Ἀβραὰμ*.

## John

As with Luke, the paragraph markers in the Gospel of John are primarily shaped like plus symbols (+) and a slanted cross (†); unlike the Gospel of Luke, no additional symbols are used. The use of each symbol is indicated in appendix Table E.4.

Of the total 390 unit divisions<sup>113</sup> in John's Gospel (both major and minor), 188 of them are collocated with Eusebian numbers (i.e., 48.21%), leaving 202 unit divisions without any association with a Eusebian number. Of those 390 divisions, 17 are collocated with chapter numbers (4.36%). Eusebian numbers and chapter numbers coincide in only 7 locations; thus only 38.89% of the extant chapter numbers (18) are collocated with Eusebian numbers. When accounting for both Eusebian numbers and chapter numbers, of the 390 total unit divisions there are 202 that occur without any Eusebian or chapter marker (51.79%) and 188 that occur with either a Eusebian or chapter marker (50.51%).

Of the 368 minor divisions, 179 of them are collocated with Eusebian numbers (48.64%), leaving 189 minor divisions without any association to a

---

<sup>113</sup> This includes all divisions which are marked by *ekthesis* except for John 1:1.

Eusebian number. Of the minor divisions, none of them are collocated with chapter numbers and 190 of them are collocated with neither a Eusebian number nor a chapter number (51.63%).

Of the 194 extant Eusebian numbers in John, only 4 of them (at John 1:19; 15:22b, 23; and 18:15) occur without being collocated with some kind of division marker (2.06%). Of the 18 extant chapter numbers in John, only 1 of them (chapter 12 at John 12:3) occurs without being collocated with some kind of division marker (5.56%).

As in Luke, chapter markers in John are very closely associated with large unit divisions. Of the 18 extant chapter markings in Luke, 17 of them are collocated with a large unit division marking (94.44%). However, of the 22 major unit divisions, 5 occur without any chapter division marker (22.73%). For sake of comparison, 3 major unit divisions occur without any Eusebian number or chapter marker (13.64%), and 2 are collocated with a Eusebian number alone (9.09%). Because of the high correlation with chapter divisions, an examination of the initial conjunctions is of limited value:

**Table 5.11: Initial conjunctions at major divisions in John**

Major Division	Initial Conjunction
2:1	καί
2:13	καί
3:1	δέ
3:25	οὖν
4:5	οὖν
4:6b	οὖν
4:42	τέ
4:46b	καί

Major Division	Initial Conjunction
5:5	δέ
6:5	οὖν
6:19	οὖν
9:1	καί
11:1	δέ
12:2	οὖν
12:4	οὖν
12:12	Ø

Major Division	Initial Conjunction
12:14	δέ
12:20	δέ
13:2	καί
15:26	δέ
18:25d	Ø
19:38	δέ



Inconsistent practice of the system of unit division does occur in the Gospel. There are 3 occurrences of a space being used without *ekthesis* or some kind of paragraph marking; in 2 of those occurrences the space is accompanied by a Eusebian number in the margin (John 6:48 and 11:56), while one occurrence has no additional markings (20:4b). At John 4:42 there is a space, the paragraph marker, but no *ekthesis*. And while *ekthesis* includes both projection into the left margin and enlargement of the extruded character, at John 10:21b the scribe has written an enlarged letter, but it was not extruded into the margin (this may, however, represent a correction). Finally, at the start of the Gospel of John, a symbol (·/·) sits above/before the first word; the symbol resembles the cross like *paragraphus* used in the Gospel but may have some other significance.<sup>114</sup>

### **Summary**

Unit delimitation in Alexandrinus is accomplished through forms of punctuation, spacing, and paragraphing that are common to fifth century Greek biblical manuscripts. Both small and large units of text are identified through the use of *ekthesis* (with or without spacing) and *ekthesis* and *paragraphus* (with or without spacing), respectively. Additional forms of unit delimitation exist in the Gospels of Alexandrinus in the forms of the Eusebian Apparatus and the use of *kephalaia* and *titloi*. The goals of studying the unit delimitation in the Gospels of Alexandrinus are necessarily modest, given the incipient nature of delimitation criticism; the mere collection of delimitation data is in itself a process unfamiliar to traditional studies.

---

<sup>114</sup> Having viewed the first folio of John in color, it does not appear that this marking was a *paragraphus* in which the crossbar faded.

Additionally, questions surround the use of unit delimitation in the Gospels of this codex. Is the system of dividing the text into small and large units of text the product of individual scribes? Is it a tradition that is carried from an exemplar text? How do the different methods of delineating the text influence one another?

Across the Gospels, some interesting patterns are visible. First, comparing all four Gospels, scribal features for unit delimitation appear to vary in significant ways between Matthew/Mark and Luke/John. In Matthew and Mark, no chapter numbers are inserted into the margins of the text; in Luke and John the chapter numbers are consistently inserted into the margins of the text. In Matthew and Mark, the *paragraphus* symbol is consistently 7-shaped (with one exception in Mark); in Luke and John the paragraphing symbols are commonly plus-shaped (+), less commonly shaped like a slanted cross (†), and rarely something else.

Second, when considering locations in which Eusebian numbers varied from their positions in NA<sup>27</sup>, it appears that Eusebian sections were drawn specifically to paragraph breaks. With this collection of data I can affirm Sanders' claim (mentioned above) that the Eusebian sections follow the paragraphing in the manuscript.

Third, there appears to be a consistent, practical use of the *paragraphus* in the Gospels, even if it varies in shape. The system of combining *ekthesis*, spacing, and the *paragraphus* is very usable and predictable. Thompson's assertion that the *paragraphus* occurs in "anomalous" positions in Alexandrinus (mentioned above) is perhaps overstating the case. It can at least be said that in the Gospels the *paragraphus* is used in a coherent way.

This first step into performing delimitation criticism on just one of the great Greek biblical manuscripts leaves a great deal of room for future study. As data from other manuscripts are gathered, it would be of value to compare the divisions found across manuscripts and look for any patterns or possible families of unit delimitation (a quick comparison of the units of Matthew in Vaticanus and Alexandrinus demonstrates that the divisions in just those two manuscripts do not match up *at all*). Further, it might be enlightening to compare the unit divisions found in the Gospels of Alexandrinus against the alleged earlier Byzantine text of the Gospels in Codex Argenteus or in other early Byzantine manuscripts and see if there is a recognizable relationship. The divisions created by the Eusebian Apparatus present a number of possible future studies—for example, did the Eusebian Apparatus adapt at all to accommodate the burgeoning Byzantine or Western textforms? And with regard to the *kephalaia* in the Gospels, a comparison of their *titloi* and placement in Alexandrinus with those found in the Old Latin manuscripts could be particularly interesting.

### *Nomina Sacra*

In recent years there has been growing research interest in the *nomina sacra* (or “sacred names”), the unique form of word contraction used from the earliest extant Christian Greek manuscripts. Unlike typical Greek forms of abbreviation, which use suspension (truncating the end of a word), tachygraphy (shorthand), or conventional signs,<sup>115</sup> the *nomina sacra* make use of contraction, omitting the central letters of

---

<sup>115</sup> Giovanna Menci, “Abbreviations,” in *BNP*.

word. The *nomen sacrum* form usually retains the first and final characters of the contracted word, but may contain one or more medial letters as well. Regardless, the abbreviated form was signaled with a supralinear mark above the entire abbreviated form.

The foundational work for *nomina sacra* studies was produced in 1907 by Ludwig Traube,<sup>116</sup> who did not have access to the wealth of Greek papyri available to researchers today. Traube suggested that the practice of contracting the *nomina sacra* originated with Hellenistic Jews who moved naturally from writing the Tetragram in Hebrew Scriptures to writing a contracted θεός in Greek. At the suggestion of C. H. Roberts, A. H. R. E. Paap produced a supplement to Traube's work in 1959 in an effort to deal with the earlier papyrus data that Traube was missing.<sup>117</sup> Paap demonstrated that the manuscript evidence did not support Traube's theory that the *nomina sacra* were a Jewish invention, and Paap instead posited a Christian origin. A further supplement to this work was produced in 1970 by José O'Callaghan, who not only contributed to the manuscript data but also sought to properly define the term *nomen sacrum*.<sup>118</sup> Apart from simply collecting

---

<sup>116</sup> Ludwig Traube, *Nomina Sacra: Versuch einer Geschichte der christlichen Kürzung* (Munich: C. H. Beck, 1907).

<sup>117</sup> A. H. R. E. Paap, *Nomina Sacra in the Greek Papyri of the First Five Centuries AD: The Sources and Some Deductions*, Papyrologica Lugduno-Batava 8 (Leiden: Brill, 1959). Paap analyzed 421 papyri in his study, ranging in date from 2nd c. BC to ca. AD 500 (though undated MSS were also included).

<sup>118</sup> José O'Callaghan, "*Nomina Sacra*" in *Papyris Graecis Saeculi III Neotestamentariis*, Analecta biblica 46 (Rome: Biblical Institute Press, 1970). O'Callaghan's suggested definition was "'Nomina sacra' are those words which primarily refer to God or divine persons, and secondarily, by participation or connexion, also to other created realities" (25). That same year, Brown identified the flaws in Traube's hypothesis (which Brown laments was uncritically adopted by Paap) regarding the origin and purpose of the *nomina sacra*; Brown concluded that the *nomina sacra* forms of the four principle terms (κύριος, θεός, Ἰησοῦς, and χριστός) were a means of expressing "in a positive way the scribe's reverence for the name of God" (Schuyler Brown, "Concerning the Origin of the *Nomina Sacra*," *SPap* 9 [1970]: 15).

and dating the uses of *nomina sacra* in the Greek (and other, particularly Latin) manuscripts, a number of scholars have sought to explain better the origin and purpose of the phenomenon.<sup>119</sup>

With such an array of research being performed on the overall phenomenon of the *nomina sacra*, the necessary task of specific manuscript studies is to describe the practice of *nomina sacra* usage in the manuscript of interest. Typical points of interest have included the contrasting of abbreviated and non-abbreviated forms of a *nomen sacrum* in a given text (and consideration of the context to warrant one form or the other), variant *nomina sacra* forms, and variations of practice among scribes and correctors.<sup>120</sup>

Though the issues of origins and purpose of the *nomina sacra* are outside the scope of this thesis, recognizing the process of development of the *nomina sacra* is useful to understanding the abbreviated forms found in Alexandrinus. For, by examining the practice of writing the *nomina sacra* in Christian manuscripts, researchers have observed that the earliest uses of the abbreviations are applied to four words—θεος, κυριος, Ιησους, and χριστος—and that, by the end of the second

---

<sup>119</sup> Of particular interest in this regard are: Colin H. Roberts, *Manuscript, Society and Belief in Early Christian Egypt* (Oxford: Oxford University Press, 1979), 26–48; Larry W. Hurtado, “The Origin of the *Nomina Sacra*: A Proposal,” *JBL* 117 (1998): 655–673; Christopher M. Tuckett, “‘*Nomina sacra*’: yes and no?,” in *Biblical Canons*, ed. Jean-Marie Auwers and Henk Jan de Jonge (Leuven: Leuven University Press, 2003), 431–458; Stanislaw Jankowski, “I ‘*nomina sacra*’ nei papiri del LXX (secoli II e III d. C.),” *SPap* 16 (1977): 81–116; Alan R. Millard, “Ancient Abbreviations and the *nomina sacra*,” in *The Unbroken Reed: Studies in the Culture and Heritage of Ancient Egypt in Honour of A. F. Shore*, ed. Christopher Eyre, Anthony Leahy and Lisa Montagno Leahy (London: Egypt Exploration Society, 1994), 221–226; AnneMarie Luijendijk, *Greetings in the Lord: Early Christians and the Oxyrhynchus Papyri* (Harvard Theological Studies 60; Cambridge, MA: Harvard University Press, 2008); and James R. Wicker, “Pre-Constantinian *Nomina Sacra* in a Mosaic and Church Graffiti,” *SwJT* 52, no. 1 (2009): 52–72.

<sup>120</sup> This is, for example, the interest of Sanders for Washingtonianus (8–12), of Parker for Bezae (97–106), of Jongkind in Sinaiticus (62–84), and of Royse for six early NT papyri (James R. Royse, *Scribal Habits in Early Greek New Testament Papyri* [Leiden: Brill, 2008], 896).

century, the body of words produced in *nomen sacrum* form began to grow to finally include fifteen commonly abbreviated terms.<sup>121</sup> By the fifth century this pool of fifteen terms was widely used and it is no surprise that all fifteen occur in Alexandrinus.

With regard to Alexandrinus, two aspects of *nomina sacra* scholarship are particularly relevant. First, recognizing *nomina sacra* in the manuscript is straightforward. As mentioned above, the contractions formed in the use of *nomina sacra* in Greek Christian manuscripts do not follow the typical means of word abbreviation but instead follow a regular and unique pattern. Paap described the format in this way:

The contractions used in Christian texts... show some peculiar characteristics: (a) there always is a horizontal stroke over the whole of the contraction; (b) the number of the words that are contracted is strictly limited; (c) beginning and end of the contractions are fixed by certain rules; (d) ... saving of space and time is not the reason why these forms are used.<sup>122</sup>

Second, in any given manuscript there are up to 15 Greek words that present in the contracted form; Traube compiled the following list of *nomina sacra* from Alexandrinus (all 15 were present), taking into account both the OT and NT:<sup>123</sup>

**Table 5.12: Traube's *nomina sacra* forms for Codex Alexandrinus**

Word	<i>Nomen Sacrum</i> Forms
θεος	ΘC, ΘE, ΘC ΤΩΝ ΘΕΩΝ
κύριος	ΚC, ΚC ΤΩΝ ΚΥΡΙΩΝ
πνευμα	ΠΝΑ, ΠΝC, ΠΝΙ, ΠΝΑΤΑ, ΠΝΩΝ, ΠΝΙΚOC

<sup>121</sup> Hurtado, *The Earliest Christian Artifacts*, 97; Roberts, *Manuscript, Society and Belief in Early Christian Egypt*, 27; cf. Traube, 34 (though Traube viewed abbreviated forms of θεος and κύριος as preceding the abbreviations of Ιησους, and χριστος).

<sup>122</sup> Paap, 2.

<sup>123</sup> Traube, 72–73. Traube not only listed the abbreviated form of the *nomina sacra*, but in the case of θεος and κύριος he also included phrases where the abbreviated form occurred with the non-abbreviated form (thus, for example, ΘC ΤΩΝ ΘΕΩΝ).

Word	Nomen Sacrum Forms
πατηρ	ΠΗΡ, ΠΡC, ΠΡΙ, ΠΡΛ, ΠΕΡ, ΠΡΕC, ΠΡΩΝ, ΠΡΛCΙΝ, ΠΡΛC
ουρανός	ΟΥΝΟC, ΟΥΝΟΥC
άνθρωπος	ΛΝΟC, ΛΝΟΥC, ΝΛΩ (for ΛΝΩ)
Δαυειδ	ΔΛΔ
Ισραήλ	ΙΗΛ, ΙCΛ, ΙΛΗ, ΛΗΛ/*
Ιερουσαλημ	ΙΛΗΜ, ΙΗΛΜ, ΙΗΜ
Ιησους	ΙC (ΙC and ΙΥ for Joshua in the OT)
χριστος	ΧC, ΧΡΥ
υιος	ΥΥ, ΥΝ (both rare in OT); ΥC, etc. in NT
σωτηρ	CΗΡ, CΡC, CΡΙ, CΡΛ
σταυρος	CΡΟΥ, CΡΩ
ματηρ	ΜΗΡ, ΜΡC, ΜΡΙ, ΜΡΛ

Years earlier, Baber had compiled a similar—albeit shorter—list in his reproduction of the LXX in Alexandrinus (1828), though his list (which was simply of abbreviated word forms) included **ΚΕ**, **ΘΝ**, **ΜΡΟC**, and **ΟΥΝΩΝ** as well.<sup>124</sup> In the *Facsimile* produced by the British Museum, Thompson (1881) listed all 15 forms “and their cases” with the addition of **ΠΝΙΚΟC**.<sup>125</sup>

While there has been much scholarly interest in scribal decisions regarding the contraction or non-contraction of the *nomina sacra* words and how those decisions relate to sacred and profane use of the terms, developing a model of determining sacred versus profane usage goes beyond the descriptive scope of this study. However, a brief mention is made below regarding the use of what Schuyler

<sup>124</sup> Henry Hervey Baber, *Vetus Testamentum Græcum e Codice MS. Alexandrino: Prolegomena et notæ* (London: Richard Taylor, 1828), vii. Baber also listed abbreviated forms of **καί**, **σου**, and **μου**—these are discussed briefly in the section that follows.

<sup>125</sup> *Facsimile*, 1:11. Woide provides a similar list (Spohn, 34–35). Other early scholarship merely made mention of the forms. Grabe (in §6 of the prolegomena to his first volume) only notes the *nomina sacra* forms in passing (Joannes Ernestus Grabe, *Septuaginta Interpretum* [Oxford: Theatro Sheldoniano, 1707]).

considered to be the *nomina divina* (the *nomina sacra* forms for the core group of terms: *θεος*, *κυριος*, *Ιησους*, and *χριστος*) as found in the Gospels of Alexandrinus.

As already mentioned, the full set of 15 terms used as *nomina sacra* appear in Alexandrinus. In the Gospels of Alexandrinus there are 1648 occurrences of the *nomina sacra*, 1665 if occurrences in the *kephalaia* tables are included. The following table compiles the data across the four Gospels:

**Table 5.13: *Nomina sacra* in the Gospels**

Gospel	<i>Nomina Sacra</i> Usage
Matthew	12 of the 15 <i>nomina sacra</i> occur (missing are <i>Δαυειδ</i> , <i>Ιερουσαλημ</i> and <i>σωτηρ</i> ) for a total of 113 uses in the extant portion of this Gospel; the <i>kephalaia</i> are missing for this Gospel
Mark	13 of the 15 <i>nomina sacra</i> occur (missing are <i>σωτηρ</i> and <i>σταυρος</i> ) for a total of 317 uses; in the <i>kephalaia</i> , 5 <i>nomina sacra</i> occur for forms of <i>θεος</i> , <i>Ιησους</i> , and <i>κυριος</i>
Luke	14 of the 15 <i>nomina sacra</i> occur (missing is <i>σταυρος</i> ) for a total of 628 uses; in four instances of the <i>nomina sacra</i> form of <i>ουρανους</i> , the form is divided across two rows (in each case placing <i>ΟΥ</i> at the end of the first row and <i>ΝΟΙC</i> , <i>ΝΟΝ</i> , or <i>ΝΟΥ</i> at the start of the next); in the <i>kephalaia</i> , 10 <i>nomina sacra</i> occur for forms of <i>Δαυειδ</i> , <i>Ιησους</i> , <i>κυριος</i> , <i>σωτηρ</i> , and <i>χριστος</i>
John	12 of the 15 <i>nomina sacra</i> occur (missing are <i>Δαυειδ</i> , <i>Ιερουσαλημ</i> , and <i>σταυρος</i> ) for a total of 590 uses; in one instance, <i>ουρανου</i> is divided across two rows (divided as <i>ΟΥ</i> and <i>ΝΟΥ</i> ); in the <i>kephalaia</i> , 2 <i>nomina sacra</i> occur for forms of <i>κυριος</i>

Regarding appearances of the *nomina divina* in the Gospels of Alexandrinus, there appears to be some distinction made between sacred and profane uses of the four terms. Though nearly every occurrence of the four terms is in contracted form in the Gospels,<sup>126</sup> a few *plene* forms occur as well, and these in contexts which rule out a divine referent.<sup>127</sup> In the *kephalaia*, only contracted forms of those four terms appear—none of those four are produced in non-contracted form and none of the

<sup>126</sup> This is not particularly surprising, however; cf. Jongkind's analysis of the four core *nomina sacra* and their use in the Gospels of Codex Sinaiticus (67–79).

<sup>127</sup> The *plene* forms include: *θεοι* (John 10:34); *θεους* (John 10:35); *κυριοις* (Luke 16:13); and *κυριοι* (Luke 19:33).



other 15 terms are contracted. However, other words from the pool of 11 other *nomina sacra* terms appear in the *kephalaia* in non-contracted forms and all of those uses are mundane or non-sacred in nature.<sup>128</sup>

As a further indication of the different habits of the two scribes in the Gospels, only the scribe of Luke and John divides the *nomen sacrum* for οὐρανος across a line break. No other division of a *nomen sacrum* occurs in any of the four Gospels, and the division by the scribe of Luke and John always separates the first two characters (ΟΥ) from the ending of the form.

### Other Abbreviations and Ligatures

#### Final *Nu*

One form of abbreviation common among early biblical manuscripts is the replacement of a *nu* at the end of a row of text with a horizontal stroke above and following the penultimate letter of the row.<sup>129</sup> Turner noted that abbreviations were not used in “well-written literary work[s]” but that this abbreviation of a final *nu* was the single exception to that rule from the middle of the second century AD forward.<sup>130</sup> This superposition is practiced throughout Alexandrinus, though very irregularly.

---

<sup>128</sup> The terms used: υἱων (ζεβεδαίου) in Mark chapter 30; πνευμα (δαιμονίου) in Luke chapter 8; υἱου (της χηρας) in Luke chapter 19; πνευμα (ασθενιας) in Luke chapter 48; and (του αποδημησαντος) υἱου in Luke chapter 57.

<sup>129</sup> Sadly, I am unaware of any scholarship that has traced the origin or geographical practice of this abbreviation; comments on the superposition are typically brief (e.g. Metzger, *Manuscripts*, 29).

<sup>130</sup> Turner, *Greek Manuscripts*, 17.

### Others

In his introduction to the first volume of the *Facsimile of Codex Alexandrinus*, Thompson listed occurrences of the abbreviated forms of **ΚΑΙ**, **ΜΟΥ**, **ΟΟΥ**, and terminators **ΤΑΙ** and **ΝΑΙ**.<sup>131</sup> In the Gospel texts, however, there is but a single abbreviation in the biblical texts: the word *καί* appears in the familiar ligature form *ϣ* in John's Gospel at the bottom of the second column at V4.F45a. There was a large correction made in the final rows of the second column, and the last full (corrected) row contains text from John 5:14 (**ΜΕΤΑ ΤΑΥΤΑ ΕΥΡΙΣΚΕΙ ΑΥΤΟΝ Ο**  
**ΙC ΕΝ ΤΩ ΙΕΡΩ**) followed by a final *ϣ* **ΕΙ** (i.e., **ΕΙ[ΠΕΝ]**)—the word is continued on the other side of the folio) written just below the final full row of corrected text. The *ϣ* ligature occurs elsewhere in the NT, also in both original and corrected text.

### Orthography

The methodology for identifying the orthographic variations found in a manuscript is straightforward: the manuscript spellings are compared with “normalized” Greek spelling and the variation patterns are recorded. Of course, misspelled words must be separated from true variant spellings and some word forms that are proper, normalized spellings may themselves represent orthographic variations (depending on context). The process of sorting and evaluating orthographic data, therefore, can turn a straightforward process into something far more time consuming. As a result, scholarly interest in the orthographic variations encountered in larger biblical codices

---

<sup>131</sup> *Facsimile*, 1:11; cf. Baber, vii.

has often manifested in generalizations for a particular manuscript because of the large amount of data that would need to be processed and presented for a thorough analysis. The onerous nature of this work might be implied by the scarcity of full orthographic studies for biblical manuscripts that are important to textual criticism. For example, when introducing their findings on the orthography of Sinaiticus, Skeat and Milne noted that “an exhaustive survey of the spelling of the original scribes has never been attempted, and indeed would require a separate study.”<sup>132</sup> Also, Parker notes in his work on Bezae that a full orthographic study of the Greek column of that bi-lingual codex “has not been undertaken” but that the 19th century summary made by Scrivener remains valuable.<sup>133</sup> And even for a short document such as  $\mathfrak{P}^{72}$  (containing the epistle of Jude and the two epistles of Peter), Wasserman’s discussion of orthography is encapsulated in less than a page.<sup>134</sup>

Since this dissertation is focused on the Gospels of Alexandrinus, the orthographic analysis below will follow suit and not include data for the entire codex. However, the analysis that follows will extend the method of previous studies in that: (1) the orthographic variants for the four Gospels will constitute a relatively complete list rather than a summary of orthographic patterns (see Appendix B for the raw data); and (2) this analysis is concluded by comparing the

---

<sup>132</sup> Skeat and Milne, *Scribes and Correctors*, 51. Jongkind extended the orthographic work of Skeat and Milne by studying the itacisms found in 95 folios of Sinaiticus, mapping the variants to each of the scribal hands (91–94).

<sup>133</sup> D. C. Parker, *Codex Bezae: An Early Christian Manuscript and its Text* (Cambridge: Cambridge University Press, 1992), 107–108; Frederick H. Scrivener, *Bezae Codex Cantabrigiensis* (London: Deighton, Bell, and Co, 1864), xlv–xlvi.

<sup>134</sup> Wasserman notes that “we could go on and list a number of other orthographic features, some of which are isolated and others that occur regularly, but that would make this discussion too long” (Tommy Wasserman, “Papyrus 72 and the *Bodmer Miscellaneous Codex*,” *NTS* 51, no. 1 [January 2005]: 150). Since Wasserman’s article was published in 2005, Royse’s work on six early NT papyri includes a list of the orthographic variations in  $\mathfrak{P}^{72}$  (885–896); Royse’s monumental work could only be accomplished by a scholar who is not averse to onerous tasks.

orthographic variations found in Alexandrinus to the geographical orthographic patterns found in Egyptian Greek.

### Historical Perspectives

Previous studies of Alexandrinus have made general/partial tables of orthographic patterns in the text. In his 1828 edition of the LXX in Alexandrinus, Baber enumerated an extensive list of orthographic patterns including: variations of vowels and diphthongs; consonant variations; added consonants; single consonants that are doubled and *vice versa*; retained primitive consonants; **N** changing to **M** or **Γ**; **M** being omitted; other omitted consonants (**Γ** and **Π**); dropped augments; and incorrect augments added.<sup>135</sup> Baber noted that various scholars had differing views regarding the orthography of the manuscript: some attributed the spelling to inexperienced scribes incorrectly taking down the dictated word, while others found the writing to be Ionic or in the Alexandrian dialect.<sup>136</sup> Certainly, just two years later, Scholz considered Alexandrinus' orthography (as well as letter shapes, the tradition inscribed on the first folio, and the preservation of the text) to be evidence that it was in fact produced in Alexandria.<sup>137</sup> Baber, however, noted that the dissemination of the Greek language through trade and conquest among foreign peoples in colonies and provinces caused a great deal of corruption in forms and that the Alexandrian speech was the target of ancient criticism. But, he continued, the LXX was birthed from that Alexandrian corruption and its vernacular forms became the Greek of the

---

<sup>135</sup> Baber, ix–xii.

<sup>136</sup> Baber, xiii.

<sup>137</sup> Johann Martin Augustin Scholz, *Novum Testamentum Graece*, vol. 1 (Liepzig: Friderici Fleischer, 1830), xxxviii.

Jews and the ordinary way of speaking/writing in both the Greek OT and NT.<sup>138</sup>

Thus, Baber seemed to suggest—without directly positing—that the “Alexandrian” forms found in Alexandrinus are a product of the sacred authors rather than the transmitting scribes.<sup>139</sup>

In 1883, Scrivener noted that the itacisms found in Alexandrinus are no more frequent than those found in contemporary manuscripts. Additionally, he claimed that the orthographic variants listed by Woide (e.g. λήμψομαι) “are peculiar to no single nation, but are found repeatedly in Greek-Latin codices, which unquestionably originated in Western Europe.”<sup>140</sup> Despite the ubiquitous nature of its orthographic variants, Scrivener maintained that the external evidence pointed to an Egyptian provenance for the manuscript.

Cowper argued for four types of orthographic variations in the codex:

(1) dialectic or provincial forms; (2) archaic forms; (3) mistakes of the ear; and (4) mistakes of the eye.<sup>141</sup> Agreeing with Scholz (and the general consensus of scholarship at the time), Cowper felt that the forms found in Alexandrinus were those of “Alexandrian Greek” and imitate Coptic forms.<sup>142</sup> Cowper provided a list of the “more remarkable of these irregularities,” which are summarized in Table 5.14.<sup>143</sup>

---

<sup>138</sup> This notion was corrected in the discovery of papyri which demonstrated that the Greek of the LXX and NT were essentially written in the Koine of the period.

<sup>139</sup> Baber, xiii–xv. This idea is picked up in recent times by Gerhard Mussies, discussed below.

<sup>140</sup> Scrivener, *Plain Introduction*, 3d ed., 100–101.

<sup>141</sup> Cowper, xii.

<sup>142</sup> Cowper, xii–xiii.

<sup>143</sup> Cowper, ix–xii. Here, as in Appendix B, the notation used by Gignac has been adopted to demonstrate the orthographic variations listed by Cowper. A shift from (normalized) ι to ει in Alexandrinus is represented with an angled bracket: ι > ει. A bidirectional exchange of ι to ει or ει to ι is represented as: ι × ει. Phonemes are indicated using diagonal lines; for example: /e/.

Apart from the simple mappings listed in Table 5.14, Cowper also included: final  $\alpha$  and  $\iota$  are not elided; transpositions of  $\epsilon/\upsilon$ ,  $\iota/\upsilon$ ,  $\upsilon/\eta$ ,  $\upsilon/\iota$ ;  $\iota$  omitted in plural  $\alpha\iota$ ;  $\gamma$  is omitted before  $\xi$  and  $\gamma\nu$ ;  $\mu$  is inserted before  $\pi$ ,  $\phi$ , and  $\psi$  in forms from  $\lambda\alpha\mu\beta\alpha\nu\omega$ ; final  $\nu$  added to accusatives ending with  $\alpha$ , verbs in  $\epsilon$ , and plurals in  $\sigma\iota$ ; and  $\rho$  is often omitted in plurals. This list, while useful for demonstrating the wide array of possible spelling variations found in Alexandrinus, was not as helpful as it could have been. For it provides no indication of how common any of the orthographic differences are or what they might indicate about the general practices of the scribes.

Variant	Variant	Variant	Variant	Variant
$\epsilon > \alpha$	$\iota > \eta$	$\iota > \upsilon$	$\omega > \omicron\upsilon$	$\gamma\gamma > \nu\gamma$
$\eta > \alpha$	$\epsilon > \iota$	$\omicron > \omega$	$\upsilon > \omicron\upsilon$	$\gamma\kappa > \nu\kappa$
$\omicron > \alpha$	$\epsilon\iota > \iota$	$\alpha > \alpha\iota$	$\epsilon\nu > \epsilon\mu$	$\mu\pi > \nu\pi$
$\omicron\nu > \alpha$	$\iota\epsilon\iota > \iota$	$\epsilon > \alpha\iota$	$\alpha\iota\nu > \epsilon\nu\nu$	$\kappa\kappa > \nu\kappa$
$\alpha > \epsilon$	$\eta > \iota$	$\iota > \alpha\iota$	$\kappa > \gamma$	$\mu\mu > \nu\mu$
$\epsilon\upsilon > \epsilon$	$\omega > \omicron$	$\iota > \epsilon\iota$	$\nu > \gamma$	$\mu\beta > \nu\beta$
$\eta > \epsilon$	$\alpha > \omicron$	$\eta > \epsilon\iota$	$\theta > \delta$	$\rho\rho > \rho$
$\alpha\iota > \epsilon$	$\alpha\upsilon > \upsilon$	$\eta > \epsilon\iota$	$\gamma > \kappa$	$\xi > \rho$
$\omicron > \epsilon$	$\omicron\upsilon > \upsilon$	$\omicron\iota > \epsilon\omega$	$\pi\pi > \mu\pi$	$\kappa > \chi$
$\epsilon > \eta$	$\omicron\iota > \upsilon$	$\eta > \omicron\iota$	$\nu\nu > \nu$	
$\epsilon\iota > \eta$	$\epsilon\upsilon > \upsilon$	$\omicron > \omicron\iota$	$\nu > \nu\nu$	

**Table 5.14: Cowper's orthographic peculiarities for Alexandrinus**

Unfortunately, each of these previous assessments of the orthography found in Alexandrinus has been partial or general in nature and based on a scholarly context prior to great papyrological discoveries of the 20th century. Subsequent studies in Greek phonology and diachrony have noted that during the Roman and Byzantine periods the Koine Greek language underwent some transformation of pronunciation that had impact on written word forms. In Roman Egypt, for example, “the influence of spoken Egyptian became increasingly perceptible: it is visible in the nonstandard spelling of words according to their phonetic pronunciation that appears

in exercises by both students and teachers.”<sup>144</sup> With regard to consonantal variations, “double consonants ceased to be pronounced differently from single ones, so a general confusion of single and double letters” occurred and “all these changes probably took place in the Roman or early Byzantine periods.”<sup>145</sup> Long vowel sounds and diphthongs of the classical system underwent an ongoing process simplification that began in the lower social classes and among the less-educated and eventually these innovations began to have an impact on official Greek writing as well; “once distinctions of vowel length were lost, the former long- and short-vowel systems fell naturally together into a simple six-vowel triangle.”<sup>146</sup> Dickey notes that starting in the second century “the short diphthong  $\alpha\iota$  merged with  $\epsilon$ , so that, for example, the verb endings  $-\epsilon\sigma\theta\alpha\iota$  (infinitive) and  $-\epsilon\sigma\theta\epsilon$  (second-person plural) became confusable.”<sup>147</sup> Prior to that, Gignac likewise noted that there is a frequent interchange of  $\alpha\iota$  and  $\epsilon$  “from the Roman period on.”<sup>148</sup> Additionally, the diphthong  $\epsilon\iota$  and the vowel  $\iota$  are frequently interchanged “in all phonetic environments throughout the Roman and Byzantine periods.”<sup>149</sup> Turner placed the period of orthographic change back a century, asserting that spelling variations for Greek vowels and diphthongs are common among manuscripts after the simplification of

---

<sup>144</sup> Raffaella Cribiore, *Gymnastics of the Mind: Greek Education in Hellenistic and Roman Egypt* (Princeton: Princeton University Press, 2001), 211.

<sup>145</sup> Eleanor Dickey, “The Greek and Latin Languages in the Papyri,” in *The Oxford Handbook of Papyrology*, ed. Roger S. Bagnall (Oxford: Oxford University Press, 2009), 153; cf. Horrocks, who notes the simplification of double consonants “beginning from the third century BC onwards” (Geoffrey Horrocks, *Greek: A History of the Language and its Speakers* [London: Longman, 1997], 113).

<sup>146</sup> Horrocks, 102; Francisco Rodríguez Adrados, *A History of the Greek Language* (Leiden: Brill, 2005), 193.

<sup>147</sup> Dickey, 152.

<sup>148</sup> Gignac, 191.

<sup>149</sup> Gignac, 189.

vowel sounds that took place in the Roman world by the first century.<sup>150</sup> Such difficulty in reconstructing the specific times at which these changes took place in each geographical environment is reflected in Horrocks' warning that "for most of these developments, the crucial issue of chronology still remains to be established."<sup>151</sup> Regarding the gradual degradation of classical styles, the practices propagated through everyday use of the spoken and written Greek and formal writing was not immune to the influence of those changes:

To a great extent this pattern of development continues throughout the Roman and Byzantine periods, with the important difference that the Koine ceases for a time to be a genuinely literary language under the impact of the Atticist movement. Henceforth high-level literary productions (i.e. those that fall into the genres of the classical tradition) aim more consistently at an Attic or Atticizing style, while the language of the official Koine and more popular forms of literature (e.g. novel genres such as chronicles and hagiography) continues to compromise, in varying degrees according to the genre/level of the text in question, between its own conservative practice and the usage of the contemporary spoken language.<sup>152</sup>

In a 1971 study, Mussies examined the orthography of the Apocalypse in Alexandrinus and concluded that several of the orthographic variations found therein represented a *preservation* of the spelling he believed would be found in the autograph. By comparing the orthographic profile of the Apocalypse of Alexandrinus with other manuscripts (P<sup>47</sup>, Sinaiticus, and Ephraemi) and correlating a probable place and date of composition with orthographic patterns found in the first few centuries AD, Mussies determined that the scribe of Alexandrinus copied his text

---

<sup>150</sup> Turner reduced the vowels to the following: "long  $\alpha$ ;  $\varepsilon = \alpha\iota$ ; unaccented  $\alpha$ ,  $\varepsilon$ ,  $o$  often interchangeable;  $\eta$  and  $\varepsilon\iota$  and  $\iota$  are identical, and not much later the same iota sound is given also to  $\alpha\iota$  and  $\upsilon$ ;  $\upsilon\upsilon$  and  $\omega$ " (*Greek Papyri*, 58). Regarding misspellings, Turner asserted that "their presence or absence in a literary text is a pointer to the degree of education of the scribe, not necessarily to the quality of the underlying text."

<sup>151</sup> Horrocks, 105.

<sup>152</sup> Horrocks, 70.



relatively faithfully, keeping the text free of fourth/fifth century intrusions while preserving the original author's peculiarities from Western Asia Minor. Thus:

The autograph of the Apc. contained in all likelihood the following orthographical peculiarities: variation  $\epsilon\iota$ - $\iota$  and the absence of iota adscript; the variations  $\alpha\iota$ - $\epsilon$ ,  $o$ - $\omega$  may have been present, if not, the corresponding phonetical changes must be assumed anyhow; the same holds good of the loss of spiritus asper. Moreover, an addition has to be made: in Asia Minor there is confusion of  $\epsilon\iota$  and  $\eta$  before an  $\alpha$  or  $o$  in the same word... It is supposed that the phonetic value of  $\epsilon\iota/\eta$  in this position was [e].<sup>153</sup>

However one evaluates Mussies' theories regarding the date/provenance of the Apocalypse and Alexandrinus or the ability to trace orthographic variations in the codex back to the autograph, his conclusion that a phonological study of the Apocalypse of Alexandrinus demonstrates an origin in Western Asia Minor is of some interest. Mussies rushes through his discussion of date and provenance of the Apocalypse without offering much support and, unfortunately, demonstrates some confusion in dealing with Scrivener and others in recounting the history of Alexandrinus. These items raise concern regarding the critical nature of his research, but his conclusions are mentioned here as an example of modern phonological research on the codex.

### Egyptian or Alexandrian Koine

Because the orthographic variations found in Alexandrinus were often used to argue for an Egyptian provenance, a general profile of Egyptian or Alexandrian Greek in the Roman period is of particular interest to this analysis. Regarding the influence of Coptic on Koine:

---

<sup>153</sup> Gerard Mussies, *The Morphology of Koine Greek As Used in the Apocalypse of St. John: A Study in Bilingualism* (Leiden: Brill, 1971), 36–41.

Sometimes, we have exaggerated: for instance, cases such as the confusion of *o* and *ω*, *ει* and *ι*, the pronunciation of *-v* in *αυ* and *ευ* as a semi-vowel, the later loss of difference in quantity, the loss of inter-consonantal *γ* and of final *-v* or the Ac. *θυγατέραν*, are general in *koine* and not specifically Egyptian. In contrast, the interchange of voiceless and voiced occlusives (they are not distinguished in Coptic) and, in certain positions, the voiceless and aspirated (these no doubt lost their aspiration) are features of the Greek of Egypt.<sup>154</sup>

Building upon the data and work of Teodorsson,<sup>155</sup> Mayser/Schmoll,<sup>156</sup> and Gignac, Consani constructed a profile of Egyptian Koine that will be useful when evaluating the data from Alexandrinus. With regard to orthographic variation in vowel sounds, Consani found that: (1) an exchange between *αι* and *α*, which was also frequent in the Ptolemaic period, indicates a reduction of the short diphthong /ai/ to /a/ or /æ/, which is unique to Egyptian Koine; (2) an exchange between *ου* and *ο* indicates neutralization between /o/ and /u/, a phenomenon attributed to interference with Coptic, most frequent at the end of the Ptolemaic period; and (3) a series of oscillations (namely, *υ* × *ε*, *οι* × *αι*, *α* × *ε*, *α* × *ο*, *ο* × *ε*) may be attributed to the influence of the Coptic phoneme /ə/, which tends to assimilate the short, middle vowels of Greek in an unstressed position.<sup>157</sup> With regard to orthographic variation among consonants, Consani observed the following distinctives: (1) an exchange between voiceless occlusives (*π*, *κ*, *τ*) and voiced occlusives and aspirated consonants (*β*, *γ*, *δ*; and *φ*, *χ*, *θ*; respectively) appears to be an obvious interference of Coptic with Greek; (2) the omission of liquids (*λ*, *ρ*) before and after occlusives is

<sup>154</sup> Adrados, 185.

<sup>155</sup> Sven-Tage Teodorsson, *The Phonology of Ptolemaic Koine* (Göteborg: Acta Universitatis Gothoburgensis, 1977).

<sup>156</sup> Edwin Mayser and Hans Schmoll, *Grammatik der griechischen Papyri aus der Ptolemäerzeit: mit Einschluss der gleichzeitigen Ostraka und der in Ägypten verfassten Inschriften* (Berlin: Walter de Gruyter, 1970).

<sup>157</sup> Carlo Consani, "La Koiné et les dialectes grecs dans la documentation linguistique et la réflexion métalinguistique des premiers siècles de notre ère," in *La Koiné grecque antique*, ed. Claude Brixhe (Nancy: Presses Universitaires de Nancy, 1993), 28–29.

frequent following the Ptolemaic period; (3) a weak nasal at the end of a syllable is not unique to Egyptian Koine (it appears in some Greek dialects in the classical period), but this variant has a high frequency in the Ptolemaic period, occurring as an omission, as a hyper-corrective, pre-consonantal insertion, or through assimilation of the nasal as a consonantal successive; and (4) oscillation of sibilants ( $\sigma$ ,  $\zeta$ ) as a sign of Coptic interference.<sup>158</sup> While more traditional or conservative forms of Greek would have been maintained by the upper class (as mentioned above), orthographic variations such as these would be expected to be present in the Greek of the middle and lower social strata, uniquely Egyptian in nature. For

le grec égyptien apparaît caractérisé par la présence de diverses formes de “sub-standard,” dont la particularité ne tient pas seulement aux phénomènes généraux du grec postclassique et médiéval (iotacisme, spirantisation des occlusives sonores et aspirées, réduction des diphtongues, etc...), mais aussi aux nombreux traits locaux que nous avons identifiés ici et dans la genèse desquels l'interférence avec le copte ne joue pas un rôle secondaire.<sup>159</sup>

This is the profile of Egyptian Koine that will be used below to evaluate the historical claims that the orthographic differences found in Alexandrinus represent an Alexandrian dialect.

### Orthography of the Gospels in Codex Alexandrinus

To assess the scribal habits regarding orthographic variation in the Gospels of Alexandrinus in a more rigorous manner than previous scholarship, and in light of more recent understanding of Greek orthography of the Roman period and later, I have provided below a complete list of orthographic patterns found in the Gospels;

---

<sup>158</sup> Consani, 28.

<sup>159</sup> Consani, 30.

Appendix B contains all the data used for this analysis. The orthographic variants are delineated according to type: first are shifts of vowels or diphthongs, followed by consonant changes.

### ***Vowels and Diphthongs***

Alexandrinus shows no exception to the trends of the Greek language found in the Roman period regarding the simplification of vowel sounds claimed by Turner or the commonality of interchanges between diphthongs and simple vowels. The most common interchanges (found in front, medial, or final positions) in the Gospels of Alexandrinus involve: (1) diphthongs and simple vowels; or simply (2) simple vowels. Additionally, with regard to vowel exchanges, there is no indication of *iota* subscripts or adscripts occurring in Alexandrinus;<sup>160</sup> this is somewhat noteworthy since Atticism had begun to re-introduce the adscripted *iota* in the second century AD to reflect “correct” orthography despite the fact that the *iota* was no longer pronounced.<sup>161</sup>

For this study, orthographic variations for each of the Gospels are dealt with in turn; a summary of the results follows after a section on the orthographic variations involving consonants.

#### **Gospel of Matthew**

In the extant portion of the Gospel of Matthew a small variety of vowel and diphthong differences are observed. By far the most common differences involve ι

---

<sup>160</sup> Cowper, viii.

<sup>161</sup> Horrocks, 116.

being replaced by  $\epsilon\iota$  in the medial position (26.09%) and  $\epsilon$  being replaced by  $\alpha\iota$  in the final position (21.74%). In fact, confusion of  $\iota/\epsilon\iota$  in either direction and in any position accounts for 45.65% of the orthographic variations while confusion of  $\epsilon/\alpha\iota$  in either direction and in any position represents 30.43% of the variations. Since

**Table 5.15: Vowel Differences in (Extant) Matthew**

Variant	# Times <sup>162</sup>
$\iota > \epsilon\iota$ in medial position	12
$\epsilon > \alpha\iota$ in final position	10
$\epsilon > \alpha$ in medial position	3
$\epsilon\iota > \iota$ in medial position	3
$\epsilon > \alpha\iota$ in medial position	2
$\epsilon\iota > \iota$ in front position	2
$\iota > \epsilon\iota$ in front position	2
$\iota > \epsilon\iota$ in final position	2
$\alpha > \eta$ in final position	1
$\alpha\iota > \epsilon$ in medial position	1
$\alpha\iota > \epsilon$ in final position	1
$\epsilon > \iota$ in front position	1
$\epsilon\iota > \eta$ in final position	1
$\epsilon\upsilon > \eta\upsilon$ in front position	1
$\eta > \alpha$ in final position	1
$\iota\epsilon > \iota\eta$ in front position	1
$\omicron > \omega$ in medial position	1
$\omicron\iota > \alpha\iota$ in final position	1
$\omega > \omicron\upsilon$ in medial position	1

these variations are widespread during the fifth century, the majority of the variations in this Gospel are perfectly ordinary, rather than specific to a geographical locale.

Compared to the profile of Egyptian Koine, the table below shows almost no correspondence whatsoever with Egyptian forms; there is a single confusion between

<sup>162</sup> To clarify the meaning of “# Times”: this refers to the number of different *lemmas* which represent a specific orthographic variation. Thus, the  $\iota$  to  $\epsilon\iota$  variation found in  $\alpha\lambda\eta\theta\epsilon\iota\nu\eta$ ,  $\alpha\lambda\eta\theta\epsilon\iota\nu\omicron\iota$ ,  $\alpha\lambda\eta\theta\epsilon\iota\nu\omicron\nu$ , and  $\alpha\lambda\eta\theta\epsilon\iota\nu\omicron\varsigma$  represents a single shift from  $\iota$  to  $\epsilon\iota$ . Also, multiple occurrences of the same word with the same orthographic variation count only once in this list.

$\alpha$  and  $\alpha$  on an unaccented syllable and two shifts from  $\varepsilon$  to  $\alpha$  on an unaccented syllable.

#### Gospel of Mark

In the Gospel of Mark, the pattern of vowel variation is very similar to what is found in the Gospel of Matthew. Again, replacement of  $\iota$  with  $\varepsilon$  in the medial position leads with 31.48% of the variations and replacement of  $\varepsilon$  with  $\alpha$  in the final position follows closely with 29.01% of the variations. Also, confusion of  $\iota/\varepsilon$  in either direction and in any position accounts for 46.91% of the orthographic variations while confusion of  $\varepsilon/\alpha$  in either direction and in any position represents 37.04% of the variations. Thus, 83.95% of the orthographic variations are accounted for with these two common orthographic variants.

**Table 5.16: Vowel Differences in Mark**

Variant	# Times	Variant	# Times
$\iota > \varepsilon$ in medial position	51	$\omega > o$ in medial position	2
$\varepsilon > \alpha$ in final position	47	$\alpha > \alpha$ in medial position	1
$\varepsilon > \iota$ in medial position	18	$\alpha, \varepsilon \nu > \alpha \nu, \varepsilon$ in medial position	1
$\alpha > \varepsilon$ in final position	7	$\varepsilon > \eta$ in medial position	1
$\iota > \varepsilon$ in final position	4	$\varepsilon > o$ in medial position	1
$\alpha > \varepsilon$ in medial position	3	$\eta > \varepsilon$ in medial position	1
$\alpha > \varepsilon$ in medial position	3	$\iota > \varepsilon$ in medial position	1
$\varepsilon > \alpha$ in medial position	3	$\iota > \eta$ in medial position	1
$\varepsilon > \alpha$ in medial position	3	$o > \varepsilon$ in medial position	1
$\varepsilon > \iota$ in front position	3	$o > \varepsilon$ in prepositional prefix	1
$\varepsilon > \varepsilon$ in medial position	2	$o > \omega$ in medial position	1
$\eta > \varepsilon$ in medial position	2	$\nu, \eta > \eta, \nu$ in medial position	1
$\eta > \varepsilon$ in final position	2	$\omega > o \nu$ in medial position	1

Regarding the Egyptian profile, as with the Gospel of Matthew there is again very little correspondence to the orthographic forms one would expect to conclude an

Egyptian origin. There is only one instance of confusion between  $\alpha\iota$  and  $\alpha$ , and one instance of confusion between  $\omicron$  and  $\epsilon$  on an unaccented syllable. There is a small amount (six occurrences) of bidirectional confusion between  $\alpha$  and  $\epsilon$ ; while not enough to be significant in terms of the Egyptian profile, it does match the increased number of incidents found in the Gospel of Matthew.

#### Gospel of Luke

In the Gospel of Luke, the profile of vowel changes varies slightly in that the number of occurrences of  $\epsilon\iota$  being replaced with  $\iota$  in the medial position overtakes the replacement of  $\epsilon$  with  $\alpha\iota$  in the final position, compared to the Gospels of Matthew and Mark. The most common orthographic variations are represented by: replacement of  $\iota$  with  $\epsilon\iota$  in the medial position (25.40%); replacement of  $\epsilon\iota$  with  $\iota$  in the medial position (15.48%); replacement of  $\epsilon$  with  $\alpha\iota$  in the final position (14.29%); and replacement of  $\alpha\iota$  with  $\epsilon$  in the final position (7.14%). Still, confusion of  $\iota/\epsilon\iota$  in either direction and in any position accounts for 47.22% of the orthographic variations while confusion of  $\epsilon/\alpha\iota$  in either direction and in any position represents 29.76% of the variations; together, these represent 76.98% of the total orthographic variations.

Regarding the Egyptian profile, the orthographic variations found in the Gospel of Luke do not correspond well for positing an Egyptian source. There is a single incident of confusion between  $\alpha\iota$  and  $\alpha$ , and one instance of confusion between  $\omicron$  and  $\alpha$  on an unaccented syllable. There are two incidences of confusion

between  $o$  and  $\epsilon$  on an unaccented syllable. As with the previous two Gospels, there is confusion between  $\alpha$  and  $\epsilon$  on unaccented syllables, though all incidents are in one direction ( $\alpha > \epsilon$ ). This does not point to an Egyptian origin, but does match the overall pattern found with the first scribe in the Gospels of Matthew and Mark.

**Table 5.17: Vowel Differences in Luke**

Variant	# Times	Variant	# Times
$\iota > \epsilon\iota$ in medial position	64	$\epsilon > \epsilon\iota$ in medial position	1
$\epsilon\iota > \iota$ in medial position	39	$\epsilon > \eta$ in medial position	1
$\epsilon > \alpha\iota$ in final position	36	$\epsilon > \iota$ in final position	1
$\alpha\iota > \epsilon$ in final position	18	$\epsilon > \iota$ in medial position	1
$\alpha\iota > \epsilon$ in medial position	9	$\epsilon > o$ in medial position	1
$\epsilon > \alpha\iota$ in medial position	9	$\epsilon\epsilon > \alpha\iota$ in medial position	1
$\iota > \epsilon\iota$ in final position	6	$\epsilon\iota > \epsilon$ in medial position	1
$o > \omega$ in medial position	6	$\epsilon\iota > \epsilon\epsilon\iota$ in final position	1
$\alpha > \epsilon$ in medial position	5	$\epsilon\iota > \eta$ in front position	1
$\eta > \epsilon$ in medial position	4	$\epsilon\iota > \eta$ in medial position	1
$\eta > \epsilon\iota$ in final position	4	$\eta > \alpha$ in medial position	1
$\iota > \epsilon\iota$ in front position	4	$\eta > \alpha\iota$ in final position	1
$\iota > \eta$ in medial position	4	$\eta > \epsilon\iota$ in medial position	1
$\epsilon\iota > \iota$ in front position	3	$\iota > \alpha$ in medial position	1
$\epsilon\upsilon > \eta\upsilon$ in front position	3	$\iota > \epsilon$ in medial position	1
$\epsilon > \alpha\iota$ in front position	2	$\iota > \eta$ in front position	1
$\epsilon\iota > \eta$ in final position	2	$\iota, \epsilon\iota > \epsilon\iota, \iota$ in medial position	1
$\epsilon\iota > \iota$ in final position	2	$o > \alpha$ in medial position	1
$\eta > \epsilon\iota$ in front position	2	$o > \epsilon$ in medial position	1
$\omega > o$ in medial position	2	$o > \iota\alpha$ in medial position	1
$\omega > o\upsilon$ in medial position	2	$o > o\upsilon$ in medial position	1
$\alpha > \alpha\iota$ in medial position	1	$o, \omega > \omega, o$ in medial position	1
$\alpha\iota > \epsilon$ in front position	1	$\upsilon, \eta > \eta, \upsilon$ in medial position	1
$\epsilon > \alpha$ in medial position	1		

### Gospel of John

Of the four Gospels, the Gospel of John leads with the highest percentage of replacements of  $\epsilon$  with  $\alpha\iota$  in the final position; however, the overall orthographic



variations are the same. The most common orthographic variations are represented by: replacement of  $\epsilon$  with  $\alpha\iota$  in the final position (24.76%); replacement of  $\iota$  with  $\epsilon\iota$  in the medial position (20.00%); replacement of  $\epsilon\iota$  with  $\iota$  in the medial position (17.14%); and replacement of  $\alpha\iota$  with  $\epsilon$  in the final position (7.61%). Confusion of  $\iota/\epsilon\iota$  in either direction and in any position accounts for 43.81% of the orthographic variations while confusion of  $\epsilon/\alpha\iota$  in either direction and in any position represents 34.28% of the variations; together, these represent 78.10% of the total orthographic variations.

**Table 5.18: Vowel Differences in John**

Variant	# Times
$\epsilon > \alpha\iota$ in final position	26
$\iota > \epsilon\iota$ in medial position	21
$\epsilon\iota > \iota$ in medial position	18
$\alpha\iota > \epsilon$ in final position	8
$\epsilon\iota > \iota$ in front position	4
$\omicron > \omega$ in medial position	3
$\alpha\iota > \epsilon$ in medial position	2
$\eta > \epsilon$ in medial position	2
$\iota > \epsilon\iota$ in front position	2
$\omicron\upsilon > \omega$ in medial position	2
$\omega > \omicron$ in medial position	2
$\omega > \omicron\upsilon$ in medial position	2
$\alpha > \iota\alpha$ in final position	1

Variant	# Times
$\alpha > \omicron$ in medial position	1
$\alpha\iota > \omicron\iota$ in final position	1
$\epsilon\iota > \epsilon$ in medial position	1
$\epsilon\iota > \eta$ in final position	1
$\epsilon\iota > \eta$ in medial position	1
$\eta > \epsilon\iota$ in final position	1
$\eta > \epsilon\iota$ in front position	1
$\eta > \upsilon\eta$ in medial position	1
$\iota > \epsilon\iota$ in final position	1
$\iota > \eta$ in medial position	1
$\omicron > \alpha$ in medial position	1
$\omega > \epsilon\omega$ in medial position	1

Regarding the Egyptian profile, the table below reveals that the Gospel of John does not reveal conformance to Egyptian forms, though the patterns are slightly different than what is found in the previous three Gospels. There is only one incidence of confusion between  $\omicron\iota$  and  $\alpha\iota$ , but that is on an accented syllable ( $\sigma\upsilon\nu\alpha\gamma\omega\gamma\omicron\iota$ ). There are two occurrences of confusion between  $\alpha$  and  $\omicron$ , but only one

occurs on an unaccented syllable. Surprisingly, there is no confusion between  $\alpha$  and  $\epsilon$  in either direction.

### *Consonant and Other Changes*

Orthographic variants in the Gospels of Alexandrinus involving consonants are far less frequent than variations in vowels and diphthongs. Among those variations, the relatively frequent process of simplification (a doubled consonant reduced to a single consonant) and gemination (a single consonant becoming a double of that consonant) occurring in the Gospels indicates that the unified pronunciation of these consonants—single or paired—is likely at work in this manuscript; within the same Gospel, both simplification and gemination of the same consonant may be found. Confusion of sounds with regard to nasals also appears to be quite common among the variants present.

#### Gospel of Matthew

In the extant portion of Matthew only four consonantal variations are observed: simplification ( $\nu\nu > \nu$ ), gemination ( $\nu > \nu\nu$ ), variation according to sound ( $\gamma\chi > \nu\chi$ ), and variation according to prefix ( $\sigma\nu\sigma > \sigma\nu\nu$ )—each of these variations indicates some confusion around nasals. Additionally there is a single transposition of syllabic vowel sounds ( $\sigma\nu, \omega > \omega, \sigma\nu$ ). The variation in the spelling of the two occurrences of  $\kappa\omicron\upsilon\sigma\tau\omega\delta\iota\alpha\varsigma$  (both as  $\kappa\omega\sigma\tau\omicron\upsilon\delta\iota\alpha\varsigma$  and  $\kappa\omicron\upsilon\sigma\tau\omega\delta\epsilon\iota\alpha\varsigma$ ) may indicate some unfamiliarity with the term, though there was one instance of confusion with  $\omega$  and  $\sigma\nu$  elsewhere. Regarding the Egyptian profile, none of the consonantal/other

variations listed in the following table match what would be expected of Egyptian Koine.

**Table 5.19: Consonant/Other Differences in Extant Matthew**

Variant	# Times
$\gamma\chi > \nu\chi$ in medial position	1
$\nu > \nu\nu$ in medial position	1
$\nu\nu > \nu$ in medial position	1
$\sigma\nu, \omega > \omega, \sigma\nu$ transposition	1
$\sigma\nu\sigma > \sigma\nu\nu$ in front position	1

### Gospel of Mark

In Mark the consonantal variations are wide ranging. They include nasal variation according to sound ( $\gamma\chi > \nu\chi$ ;  $\mu > \nu$ ), simplification ( $\beta\beta > \beta$ ;  $\gamma\gamma > \gamma$ ;  $\rho\rho > \rho$ ), gemination ( $\chi > \kappa\chi$ ;  $\lambda > \lambda\lambda$ ;  $\nu > \nu\nu$ ;  $\tau > \tau\tau$ ), insertion of a nasal ( $\zeta > \nu\zeta$ ,  $\phi > \mu\phi$ ,  $\psi > \mu\psi$ ), omission of a sibilant ( $\sigma\tau\rho > \tau\rho$ ,  $\sigma\phi > \phi$ ), an exchange of velars before an aspirate ( $\chi > \kappa$ ), interchange of an aspirated and voiced dental ( $\theta > \delta$ ),<sup>163</sup> variation according to prefix ( $\sigma\nu\sigma > \sigma\nu\nu\sigma$ ), assimilation of nasals in word-junction,<sup>164</sup> and omission of a final  $\sigma$ . The two variants that occur more than once are of the first pattern: insertion of a medial nasal before a stop (both at 12.5%). As with the Gospel of Matthew, confusion around nasals is most common.

Regarding the Egyptian Koine profile, this Gospel has only one instance of confusion between a voiceless stop and an aspirated stop/fricative ( $\chi > \kappa$ ). Possibly a result of the general confusion around nasals, the Gospel does exhibit several of the nasal issues associated with Egyptian Koine: one incident of assimilation with a

<sup>163</sup> This is rare according to Gignac (96) but here occurs in a proper name.

<sup>164</sup> “Final  $-\nu$  normally remains  $-\nu$  before every consonant, as in modern editorial practice; but it is sometimes assimilated in writing to  $\mu$  before another  $\mu$ ” (Gignac, 166).

following consonant (εν μεσω > εμμεσω), one incident of an omitted nasal (γγ > γ), and three incidents of hyper-corrective pre-consonantal insertion of nasals. The nasal confusion alone is unlikely to be sufficient to point to an overall correspondence with the Egyptian profile, especially given the general confusion with nasals found here and elsewhere in the Gospels.

**Table 5.20: Consonant/Other Differences in Mark**

Variant	# Times
γκ > νκ in medial position	3
μ > ν in medial position	3
Assimilation of ν	1
Omitted final σ	1
ββ > β in medial position	1
γγ > γ in medial position	1
ζ > νζ in medial position	1
θ > δ in medial position	1
κ > κκ in medial position	1
λ > λλ in medial position	1
ν > νν in medial position	1
ρρ > ρ in medial position	1
στρ > τρ in medial position	1
σσσ > συνσ; insertion of nasal in medial position	1
σφ > φ in medial position	1
τ > ττ in medial position	1
φ > μφ in medial position	1
χ > κ in medial position	1
ψ > μψ in medial position	1
ψ > φ in front position	1

### Gospel of Luke

In the Gospel of Luke there is a much wider range of consonant variation, listed in full in the table that follows. Medial confusion or insertion of nasals are the most common consonantal orthographic variation, accounting for 46.67% of the total variants (the γκ > νκ shift alone accounts for 11.11% of the total variants). Both

gemination and simplification occur (13.33% and 11.11% of total variants, respectively), and the uncommon interchange of an aspirated and voiced dental occurs in both directions ( $\theta > \delta$  and vice versa).

**Table 5.21: Consonant/Other Differences in Luke**

Variant	# Times
$\gamma\kappa > \nu\kappa$ in medial position	5
$\mu\pi > \nu\pi$ in medial position	4
$\psi > \mu\psi$ in medial position	4
$\lambda > \lambda\lambda$ in medial position	3
$\nu > \nu\nu$ in medial position	3
$\rho\rho > \rho$ in medial position	3
$\mu > \nu$ in medial position	2
$\phi > \mu\phi$ in medial position	2
Assimilation of $\nu$	1
Interchange of aspirated/voiced stop	1
Omission of $\rho$ after a stop	1
$\beta > \mu\beta$ in medial position	1
$\gamma\gamma > \gamma$ in medial position	1
$\gamma\xi > \xi$ in final position	1
$\gamma\chi > \nu\chi$ in medial position	1
$\delta > \theta$ in final position	1
$\zeta > \nu\zeta$ in medial position	1
$\zeta > \sigma$ in final position	1
$\theta > \delta$ in medial position	1
$\rho\alpha > \alpha\rho$ in medial position	1
$\sigma\sigma > \sigma$ in medial position	1
$\sigma\phi > \phi$ in medial position	1
$\tau > \nu\tau$ in final position	1
$\tau > \rho\tau$ in medial position	1
$\chi > \gamma$ in medial position	1
$\chi > \kappa\chi$ in medial position	1
$\chi\mu > \gamma\chi$ in medial position	1

Regarding the orthographic patterns found in Egyptian Koine, this Gospel manifests one incident of an interchange of an aspirated and voiced stop ( $\mu\alpha\theta\theta\alpha\tau$  or  $\mu\alpha\tau\theta\alpha\tau > \mu\alpha\tau\tau\alpha\theta$ ; though this proper name does vary in spelling even in normalized

form), one incident of a liquid dropping out after a stop ( $\iota\delta\rho\omega\varsigma > \iota\delta\omega\varsigma$ ), and one incident of confusion between sibilants ( $\zeta > \sigma$ ). While there are a few incidents of some confusion between voiced and aspirated stops ( $\delta \times \theta$ ,  $\chi > \gamma$ ), confusion among fricatives is not part of the profile. As with the previous two Gospels, this one does exhibit general confusion with nasals. Matching the profile are the following: one incident of assimilation with a consecutive consonant and nine incidents of hypercorrective pre-consonantal insertion of nasals. Thus, one of the criteria for matching the Egyptian profile appears to be met in this Gospel, although this single match does not indicate that the orthography of this Gospel mimics that of Egyptian Koine.

#### Gospel of John

In the Gospel of John there are few orthographic variants not involving vowels/diphthongs, but the variants are more erratic than in the other Gospels. The most common variants include simplification (19.05% of the total variants;  $\nu\nu > \nu$  alone represents 14.29% of the total variants), gemination (9.52%), the replacement of  $\kappa$  with  $\gamma$  in a medial position (9.52%), and the insertion of a nasal (9.52%). The variants are erratic in that—unlike the other three Gospels—they include omitted syllables ( $\beta\alpha$ ,  $\pi\epsilon$ , and a prefixed  $\epsilon\nu$ ), the addition of  $\nu$  to a noun ( $\chi\epsilon\iota\rho\alpha\nu$ ), and the confused form of  $\epsilon\pi\nu\gamma\alpha\zeta\omicron\nu$  (not included in the table that follows).

Comparing the consonantal differences with the Egyptian profile, this Gospel has one confusion between a voiceless and a voiced stop ( $\kappa > \gamma$ ). Regarding confusion of nasals—which is common across all four Gospels—there is very little matching the patterns of Egyptian Koine: one incident of adding a final  $\nu$  and two

incidents of hyper-corrective pre-consonantal insertion of nasals (both  $\psi > \mu\psi$ ).

These few matches do not indicate that the consonantal/other differences originate from an Egyptian Koine context.

**Table 5.22: Consonant/Other Differences in John**

Variant	# Times	Variant	# Times
$\nu\nu > \nu$ in medial position	3	Omitted medial syllable $\pi\epsilon$	1
Movable $-\nu$	2	$\epsilon\nu\epsilon > \epsilon$ in front position	1
$\kappa > \gamma$ in medial position	2	$\lambda > \lambda\lambda$ in medial position	1
$\psi > \mu\psi$ in medial position	2	$\mu\mu > \nu\mu$ in medial position	1
Added final $\nu$	1	$\nu > \nu\nu$ in medial position	1
Elision (before vowel)	1	$\xi > \zeta$ in medial position	1
Movable $-\nu > \mu$ , final position	1	$\sigma\nu\sigma > \sigma\nu\nu$ in front position	1
Omitted medial syllable $\beta\alpha$	1	$\chi > \xi$ in medial position	1

### *Summary of Orthographic Variations in the Gospels*

Having established the general landscape of orthographic differences found in the Gospels of Alexandrinus (and to some degree beyond), what patterns are apparent? First, there is a much higher incidence of orthographic variation in vowel sounds than in consonants. With regard to vowel sounds, the most common variations involve  $\iota \times \epsilon\iota$  and  $\epsilon \times \alpha\iota$ , both of which are common to Greek manuscripts of a broad geographical range in the fifth century. The wealth of Greek manuscripts discovered and studied in the 20th century has provided a means of producing a profile of Egyptian Koine which was unavailable to earlier scholarship regarding Alexandrinus and comparison with this profile has demonstrated that Alexandrinus does not exhibit Egyptian Greek forms. A summary of the important variants from

this profile and the number of occurrences of them in each of the Gospels makes this quite clear:

**Table 5.23: Summary of vowel shifts in the Gospels  
(Matching Egyptian Greek)**

Feature	Matthew	Mark	Luke	John
$\alpha\iota \times \alpha$	0	1	1	0
$o \times u$	0	0	0	0
$u \times \varepsilon$	0	0	0	0
$o\iota \times \alpha\iota$	1	0	0	0
$\alpha \times \varepsilon$	2	6	5	0
$\alpha \times o$	0	0	1	1
$o \times \varepsilon$	0	1	2	0

And from this table there appears to be no flattening of  $u$  with regard to either  $o$  or  $\varepsilon$  for unaccented (or accented) syllables in the Gospels. The only orthographic pattern that matches the Egyptian profile is a slight elevation in occurrences of  $\alpha \times \varepsilon$  in the first three Gospels.

With regard to consonantal/other variation, the most common confusion involves nasals, typically alternate spellings with equivalent pronunciation (e.g.  $\gamma\kappa > \nu\kappa$ ). Gemination and simplification are both common enough and typical of manuscripts from this period. The orthographic variations have very little in common with the variants found in Egyptian Koine; the one pattern from the Egyptian Koine profile that occurs with any frequency (in the Gospels of Mark, Luke, and to a small degree John) involves the hyper-corrective use of pre-consonantal nasals. However, that variation was not restricted to Egyptian Koine and without a significant presence of the other consonantal indicators that single pattern does not indicate that the variations are Egyptian in origin. In fact, it may be safely concluded, based on all of the orthographic data from the Gospels presented



above, that the orthography of the Gospels can no longer be used as an argument for Egyptian provenance of Codex Alexandrinus.

### Conclusions

Regarding the scribal hands at work in the Gospels of Alexandrinus, the evidence collected in Chapter 3 and supported with additional findings in this chapter strongly support the independent conclusions of Kenyon, Thompson, Woide, and Cavallo that there are two distinct hands: the first at work in the Gospels of Matthew and Mark and in the *kephalaia* of Luke; the second at work in the Gospels of Luke and John. While the arguments of Skeat and Milne support the work of a single scribe in the Gospels, the quantitative analyses of Chapter 3, in conjunction with a palaeographical argument similar to that of Kenyon and others deals a serious blow to the modern treatments of the data. It is my conclusion that there are two scribes at work in the Gospels and that further analysis of the NT books of Alexandrinus should be performed to identify other lines of delineation.

The unit delimitation in the Gospels of Alexandrinus is accomplished at several levels. At the highest level, paragraphs fall into major and minor divisions. Major paragraphs are marked through use of the *paragraphus* (in various shapes) combined with *ekthesis*; spacing may or may not accompany these divisions. Minor paragraphs are marked through the use of *ekthesis* with or without spacing. Minor paragraphs occur often and are more numerous than major paragraphs. The two scribes of the Gospels draw the *paragraphus* differently: the scribe of Matthew and

Mark draws it consistently in a 7-shape while the scribe of Luke and John varies the *paragraphus*, commonly drawing it as a plus-shape (+) or a slanted cross (†).

At the lowest level, an additional reader's aid is found in the form of rudimentary punctuation marks. This punctuation is accomplished through the use of a high or medial point, which appears to be used interchangeably and with some inconsistency. When used, the point (high or medial) is used to mark the end of a sentence or as a comma to separate a list—at times a list of only two items. This mark is used not only in the Gospel texts but also in paratext such as chapter titles. Additional punctuation in the Gospels includes the use of the diaeresis/trema and the apostrophe. The diaeresis is fairly consistently used to indicate leading vowels in words beginning with iota or upsilon, and only rarely to indicate other leading vowels. In addition, the diaeresis signals vowels not to be joined with an adjacent vowel to form a diphthong, sometimes marking off vowels that cannot join with an adjacent vowel to form a diphthong. The apostrophe is used to indicate the terminus of words ending in letters unusual to the ending of Greek words (e.g., **ζ** or **π**) or to serve as a syllable divider; the scribes use the mark in both ways rather inconsistently.

The *diple* (un-pointed, pointed, and double pointed) is used to mark OT quotations in the Gospels, but primarily those drawn from Isaiah or the Psalms. The use of the *diple* appears to be coeval with the production of the manuscript, as the scribes in all four Gospels made attempts to adjust the layout of the quoted text to fit within the marked rows, using spaces to delineate the quoted text when adjusting letter sizes was insufficient for that task. Whether the *diple* is pointed or not appears

to have no impact on the meaning of the sign or to serve as an indicator of the scribal hand.

Unit divisions larger than paragraphs occur in both the OT and NT, and in the Gospels these units are in the form of chapters. At the beginning of each Gospel (*sans* Matthew, for which the beginning is lost) the chapters are listed in an index and named with a title. Here the preference of the two scribes of the Gospels is made plain as the scribe of Matthew and Mark never places the chapter numbers in the margins of the Gospel text while the scribe of Luke and John does.

An additional form of unit division occurs in the Gospels in the form of the Eusebian Apparatus. While the Ammonian section numbers are used to divide the Gospel texts into pericopes, both scribes of the Gospels appear to have varied the position of the Ammonian section numbers according to the placement of paragraphs in their texts; that is, where the position of Ammonian section numbers varies from the normalized position (according to NA<sup>27</sup>), the section numbers naturally gravitated to the paragraph divisions used by the scribes.

The scribes of the Gospels of Alexandrinus use the fifteen *nomina sacra* found in most fifth century manuscripts, both in the biblical text and in paratextual features as well (in the *titloi* and *kephalaia*). Use of the *nomina sacra* forms occurs not only in the biblical text but also in the chapter titles (both in in the index and in the upper margin of the page). The four *nomina divina* appear to be used appropriate to context; when there is a divine referent the abbreviated form is used and when there is a profane referent the *plene* form is used. Only the longer *nomina sacra* for *ουρανός* occurs divided across a line break, and this word division is only performed

by the scribe of Luke and John, serving as another indication of their differing scribal habits.

Regarding the orthography of the Gospels, there are a great number of variant forms for vowels/diphthongs and a small number of variants for consonants. By far the most frequent vowel variations involve the widespread confusion between  $\epsilon$  and  $\alpha$  (often with verb forms) and between  $\iota$  and  $\epsilon$ . These exchanges are, by the fourth/fifth century AD, not regional. Among the consonantal changes, the most common involve confusion of nasals, either by substituting letters with equivalent sounds, confusing  $\mu$  and  $\nu$ , and omitting or inserting nasals (usually before an occlusive). Gemination and simplification are also relatively common among the consonantal changes. More interesting, however, is the fact that the overall orthography of the Gospels does not match the orthographic profile of Egyptian Koine. This means that the orthographic patterns of the codex, which for the last 150 years has been used by some scholars to support a claim for Egyptian/Alexandrian provenance, has been overturned.

## CHAPTER VI

### CONCLUSION

The previous chapters of this study explore the palaeography and codicology of Alexandrinus from the narrow perspective of the Gospels and in the close context of each type of analysis. Despite the limited scope of the overall investigation, from these pieces of the puzzle that record the creation and history of the manuscript a picture begins to emerge. There is no reason to repeat the conclusions of the other chapters, so in this final chapter I would like to take a step back and make some general comments regarding this preliminary picture that has formed, a picture which will certainly become more detailed and refined as further territory in the codex is charted by future explorers.

#### **Creation of the Codex**

In light of the analysis from the preceding chapters, some remarks on the manufacture of the codex are warranted. First, regarding the *mise-en-page* for the codex, there are intriguing points of uniformity and dissimilarity among the three identified scribal hands. In a manuscript where the scribes have adopted a model script, presumably in an attempt to create a singular look-and-feel for the codex, it is not surprising that the three NT hands would use a similar template or story stick to determine their page layout. While the story stick was posited in Chapter 3 merely for the sake of description, *some* type of marked template object must have been used

by all three scribes in order to create a page layout in which the first column of each page was, without variation, somewhat narrower than the second column. However, the disparity in column width *among* scribes utilizing the same template requires that: (1) the scribes used the story stick differently; (2) the story stick was copied imprecisely and distributed to the scribes; or (3) some unknown factor influenced the page layout. That is to say, each scribe had a fixed template, each template followed the same general pattern (e.g., column two wider than column one), and yet each scribe's use of the template resulted in a distinguishably and statistically significant different result. Also, variation in number of rows per column or in row height did not seem to be a concern for the overall effort; only a scribe's personal habits dictated the practice of those specifics.

Second, both the paragraphing and the chaptering of continuous script Greek represent interpretive tasks. Among the early NT manuscripts, Alexandrinus reflects a beginning effort in unit delimitation that had yet to be formalized in the manuscript tradition. The paragraphing in Alexandrinus is closely related to, but not identical to, the chaptering system. Where the positions of the pericope markers from the Eusebian Apparatus (i.e., the Ammonian sections) did not match up with the paragraphing breaks, the Apparatus was afforded lower priority such that it was adjusted to fit into the chapter/paragraphing scheme. Since the chaptering system encountered in Alexandrinus is unlikely to have originated with the codex, the

paragraphing in the manuscript may represent the most recent layer of unit delimitation present in the Gospels.<sup>1</sup>

Third, it is interesting that the two scribes involved in the copying of the Gospels operated with some freedom regarding the execution of paratextual features, despite the uniform look of their script. Both scribes added chapter titles to the upper margin of the Gospels and marked them in the text, but only the second scribe added chapter numbers to the left margins. Both scribes ornamented the Eusebian Apparatus, but both were relatively free in varying the ornamentation, despite each scribe having his own “default” ornamentation style. Both added decorated tailpiece designs to the ends of books (quite possibly based on an exemplar, if the common motifs between the Gospel of Matthew and Acts are any indication), but each injected personal decorative habits into the artwork. It appears that it was important that the paratextual features be *present* in the codex, but not important that they be added with strict uniformity of style.

### **The Eusebian Apparatus and Use of Numbers**

From the small sampling of manuscripts used to study the cascading errors in the Apparatus, there was a clear delineation in habit between the Greek scribes and the Latin scribes: the former were error-prone and seemed to have little concern for correcting those errors; the latter had very low error rates regarding transmission of the Apparatus (and even evidenced corrections made to the Apparatus). The error-prone habit of the Greek scribes is encountered in Alexandrinus as well. Concerning

---

<sup>1</sup> That is, it is likely that the priority of the delimitation system reflects the order in which the systems were applied. The priority in Alexandrinus appears to be: paragraphing (highest); chaptering; Eusebian Apparatus (lowest).

the transmission of the Eusebian Apparatus in Alexandrinus, the error rates for both the placement of the Ammonian sections and the recording of the canon number values were significantly higher than what I found in the sample Latin manuscripts. The greater frequency and length of cascading errors encountered in Alexandrinus, when compared to the other Greek manuscripts that were sampled, serve as a testimony to the carelessness of the scribes with regard to the transmission of the canon numbers. What is particularly interesting about this is that not even a century distant from the initial implementation and dissemination of the Eusebian Apparatus we have in Alexandrinus a manuscript that seems to be merely going through the motions of providing the Apparatus, perhaps for readers that would never make use of it or correct its errors (cf. the failure of one scribe to correct the numbering in the index of Psalms once he realized his error and reset the numbering). Given the liturgical interventions present in the codex, perhaps its designers and the majority of its users were more concerned with locating daily readings in Scripture than with the “scholarly” activity of comparing similar pericopes in the Gospels. Access to the biblical texts (which did undergo correction and preservation) may have simply occupied the attention of the manuscript’s users more fully than the feature set attached to those texts (which do not seem to have undergone *any* correction).

### **Palaeography and Statistical Analysis**

As a relatively young field, the practice of palaeography lingers somewhere between art and science; as such, when master practitioners of palaeography disagree in their conclusions—as has been the case in determining the number of hands at



work in the NT of Alexandrinus—some form of arbitration outside the practice of palaeography is needed to settle the dispute and reach an answer. In this dissertation, the exploratory use of statistical analysis of the paratextual features of the codex has proven useful in confirming (rather than replacing) the conclusions of the palaeographical analysis performed in Chapter 4. The subjective evaluation of scribal hands and the description of scribal habits are absolutely necessary to accomplish the work of textual criticism, papyrology, and the like. However, by introducing some statistical analysis (in a very small way) into the palaeographical study of an important biblical manuscript, and subsequently demonstrating the usefulness of the analysis in confirming or rejecting the delineation of scribal hands based on palaeographical conclusions, my hope is that other researchers in this field will be encouraged to develop and utilize similar objective methods of investigation to enhance and fortify their conclusions in what is otherwise a very subjective field.

The use of statistical analysis in this dissertation suffers from the drawback that similar data for other contemporary manuscripts are not available for comparison. Once a body of statistical data has been collected for a number of manuscripts, a broader type of comparative study will become possible with regard to evaluating the statistical profile of a target manuscript against a collection of others.

### **Updating the Alexandrinus Knowledge Base**

As a result of the preceding analyses, a number of outdated ideas regarding Alexandrinus must be purged from the knowledge base of the codex. First, the study

of the orthographic variations in the Gospels has demonstrated (insofar as the spelling habits within Alexandrinus are consistent) that the orthography of the manuscript can no longer be used to demonstrate Egyptian provenance for the codex; additionally, that orthographic data from the manuscript may eventually be useful in positively determining its geographical point of origin rather than simply negatively ruling out prior conclusions. Second, Skeat and Milne's position that a single scribe was the copyist of the canonical NT books can be laid to rest; two hands have been definitively demonstrated to be present in the Gospels and a third in Revelation. Scholars of NT textual criticism should trust these scribal boundaries when evaluating the internal evidence for variant readings present in Alexandrinus. Third, to echo the urging of Scot McKendrick, searching out the provenance of Alexandrinus should be pursued without being fettered by the legend of Thecla; the manuscript was copied by several hands, it has no particular evidence pointing to Egyptian provenance, and (as Scot McKendrick and others have argued) its passage through Constantinople in the hands of Athanasius II may be a more interesting lead to pursue regarding the manuscript's place of origin.

In addition to casting aside outdated information about the manuscript, this modern exploration of the paratextual features found in the codex introduces an opportunity to say more about its design and use. As a large-sized pandect with generous margins, formal and uniform script produced by each of the hands, mixed black and red inks, a wealth of readers' helps, and illustrated tailpieces, Alexandrinus certainly represents a deluxe Bible that was considered important by the individual or individuals who commissioned its creation. The manuscript represents an expensive

investment, not only in materials and time, but also in the number of scribes that labored to copy the text.<sup>2</sup> Moreover, the codex was produced with a rich feature set. Though the Old Greek chaptering system appears to pre-date the codex, Alexandrinus represents the earliest extant witness to that system and was perhaps an early adopter of that feature. If I have correctly identified the source of the Eusebian Apparatus as coming from a separate exemplar, then the Apparatus may also have been a novelty for the copyists of Alexandrinus. In addition to these unique innovations, Alexandrinus was also equipped with other non-essential—or bonus—features such as marked quotes from the OT and supplemental texts such as the Odes, the Hypotheses, 1–4 Maccabees, the epistles of Clement, and the Psalms of Solomon. A complete Greek Bible would have been a treasure to an individual or institution in the fifth century; the treasure that is Alexandrinus placed a wealth of *additional* material at its owner’s fingertips.

Regarding the intended usage of Alexandrinus, a number of features included in the production of the manuscript facilitated reading the codex for oral performance (either private or public). Helps of this nature include: the division of the text into paragraphs or pericopes clearly indicated by means of spacing and enlarged letters in the left margin; leading vowels marked with a diaeresis; unusual word endings marked with a hook or apostrophe; and the liberal use of punctuation and the *paragraphus* to indicate breaks in lists, sentences, or sections of text. Because a codex of this size was more likely to be owned by an institution than by an individual (such was the case with Alexandrinus since the time of Athanasius II), and due to the

---

<sup>2</sup> The size and scope of the manuscript certainly introduce a limitation with regard to where the codex could have been manufactured.

importance of reading Christian texts aloud in the worship setting, the many reader aids present in Alexandrinus were probably geared toward facilitating use of the codex in a liturgical setting.<sup>3</sup>

One aspect of scribal culture revealed through this analysis is the apparent separation of materials between NT Scribe 1 and NT Scribe 2. Where the Gospels transition from the first scribe to the second, there is also a change in vellum (as evidenced by the shift in skin quality) and ink hue. Whether scribes at such a facility manufactured their own ink or not, the differing hues in *atramenta* are perhaps unsurprising since there would be natural variation of color for every batch of ink produced. But if Alexandrinus was in fact created in a scriptorium setting, individual scribes apparently had individual caches of vellum. That is, the quire structure of the codex was not produced by a single overseer who then farmed work out to individual scribes. This is clearly supported by the apparent confusion that occurred at the boundary of the Gospel of Mark and Luke, where it seems that NT Scribe 2 was unaware that he needed to produce the *kephalaia* list for the Gospel of Luke. The difference in materials between NT Scribe 1 and NT Scribe 2 might, at first blush, seem to indicate that NT Scribe 2 was not one of the original copyists of the manuscript, but created replacement quires to be inserted into the work of NT Scribe 1. That would, after all, explain the change of habits in how the chaptering system was rendered in the Gospels of Luke and John, among other minor paratextual variations. However: (1) the high error rate in transmitting the Eusebian Apparatus

---

<sup>3</sup> See, for example, Harry Y. Gamble, *Books and Readers in the Early Church* (New Haven: Yale University Press, 1995), 8–9; Larry W. Hurtado, *The Earliest Christian Artifacts* (Grand Rapids: Eerdmans, 2006), 174–182.

across all four Gospels—as well as the ubiquitous cascading error in the Apparatus, which is clearly coupled with the page layout—mitigates out that possibility; and (2) the “story stick” template used by NT Scribe 2 is the same as that used by NT Scribe 1 and NT Scribe 3.<sup>4</sup> Thus, a glimpse into the culture of the scriptorium is provided by the confirmation that two scribes were at work in the Gospels.

### Final Words

I must say that it was very satisfying to perform the first, in-depth, modern palaeographical/codicological study of this kind for Alexandrinus. For those “future explorers” who wish to study the codex, I hope that this work provides a sturdy foundation for additional research. At the most fundamental level, this work provides a systematic, descriptive catalog of features found in Alexandrinus, something which was sorely lacking in the historical examinations of the codex. With a codex of this size, I found use of the Concordance tables particularly helpful in navigating the manuscript; Young’s page numeration is more immediately helpful when traversing the pages of the facsimile editions and the absolute folio numeration is helpful when viewing the NT images on-line.

My suspicion is that study of the codex has been hindered by a few obstacles. First, many of the historical treatments of the codex are difficult to obtain outside of rare book rooms. Not only is it unusual to find the full-sized *Facsimile* at a library within reasonable distance, but the *Reduced Facsimile* and the works of Wettstein, Baber, Walton, et al. are also not easily accessible to many researchers. Second, a

---

<sup>4</sup> To imitate the idiosyncratic column layout (column widths, inner margin, etc.) of NT Scribe 1 and NT Scribe 3 without also imitating more distinctive features (such as number of rows per column) is highly improbable.

bulk of the historical research is written in neo-Latin, which has fallen out of fashion in postgraduate circles. Third, until 2012 there were only a handful of color images of Alexandrinus available in a limited number of publications (and the color images were of typically of the same few pages). Fortunately, obstacles to studying the manuscript are beginning to fall away: the British Library has published digital images of the NT and at least a few of older research materials have begun to appear on-line in scanned formats. If the OT can be conserved and made available on-line as well, some great opportunities will open up for researchers.

Finally, after the effort involved in studying the codex and analyzing its pages was complete, it was sobering to realize that so much more work needs to be done. While Alexandrinus has become a familiar landscape to stroll, so many aspects of its history remain virgin territory that has yet to be settled by adventurous scholars. As the poet writes:

“Knowledge is proud that she has learned so much,  
Wisdom is humble that she knows no more.”

## APPENDIX A

### TABLES OF CONCORDANCE

#### Old Testament Table of Concordance

The table that follows correlates the actual extant page numbers with: (1) the extant quire numbers; (2) the extant Arabic page numbers (numbers that have been lost due to shearing are supplied and enclosed in square brackets); (3) the page numbering written by Patrick Young in ink (at center of the upper margin, right-facing side only) and by a later handler of the manuscript in pencil (at upper right corner, right-facing side only); and (4) the absolute numbering according to the current binding (including modern flyleaf additions).<sup>1</sup> Chapters and verses for each of the biblical books are taken from the *Reduced Facsimile*, except where they have been corrected. Quire numbers listed in parenthesis are missing from the manuscript but have some trace evidence of their existence, such as a small portion of the number or the ornamentation around the numeration; if no evidence remains of a quire number where one is expected, the entry is left blank.

---

<sup>1</sup> An explanation of the format for absolute numbering is found in Chapter 1. When viewing images of the manuscript it is often easier to look for Young's ink numeration first.

## Volume 1

BOOK	QUIRE	ARABIC <sup>2</sup>	YOUNG	ABSOLUTE
[blank] "Vol. I." and contents	n/a	n/a	n/a	V1.F1
"donum datum" note "Harl. 823, 2...." note	n/a	n/a	n/a	V1.F2
Note from Cyril Lucar [blank]	n/a	n/a	-- / 2	V1.F3
Ancient TOC [Arabic inscription]	n/a	n/a	--	V1.F4
Genesis 1:1–25 1:25–2:15	ⲕ = 1	[1]	1 / 5	V1.F5
2:15–3:13 3:14–4:11		[2]	2 / [6]	V1.F6
4:11–5:9 5:10–6:4		[3]	3 / [7]	V1.F7
6:4–7:5 7:6–8:6		[4]	4 / [8]	V1.F8
8:6–9:7 9:7–10:7		[5]	5 / [9]	V1.F9
10:8–11:7 11:8–32		[6]	6 / [10]	V1.F10
11:32–13:3 13:4–14:8		[7]	7 / [11]	V1.F11
14:8–15:1 15:6–16:6		[8]	8 / [12]	V1.F12
16:10–17:19 17:19–18:16	Ⲕ = 2	[9]	9 / [13]	V1.F13
18:16–19:6 19:6–27		ⲓⲟ	10 / [14]	V1.F14
19:27–20:8 20:8–21:14		[1]1	11 / 15	V1.F15
21:14–22:3 22:3–23:4		[1]2	12 / [16]	V1.F16
23:4–24:7 24:7–28		[1]3	13 / 17	V1.F17
24:29–49 24:49–25:6		[14]	14 [18]	V1.F18
25:6–30 25:31–26:18		15	15 / [19]	V1.F19
26:18–27:5 27:6–30		[1]6	16 / [20]	V1.F20

<sup>2</sup> Using the extant Arabic page numeration, numbers that are missing entirely have been reconstructed in square brackets to reveal any sequence interruptions. Numbers that are partially visible and can be determined with some probability are marked with a dot below the uncertain number (e.g., 0̣). The *Facsimile* tends to capture more of the bottom left corner of the MS folios than the *Reduced Facsimile*, though the *Reduced Facsimile* is often clearer.



BOOK	QUIRE	ARABIC <sup>2</sup>	YOUNG	ABSOLUTE
27:30–28:5 28:5–29:6	Γ <sup>3</sup> = 3	17	17 / [21]	V1.F21
29:6–33 29:33–30:24		18	18 / [22]	V1.F22
30:25–31:5 31:5–30		[1]9	19 / [23]	V1.F23
31:30–48 31:48–32:18		[20]	20 / 24	V1.F24
32:18–33:10 33:10–34:13		21	21 / [25]	V1.F25
34:13–35:1 35:1–26		[22]	22 / [2]6	V1.F26
35:26–36:24 36:25–37:8		23	23 / 27	V1.F27
37:8–29 37:29–38:16		[24]	24 / 28	V1.F28
38:16–39:6 39:6–40:5	Δ = 4	25	25 / 29	V1.F29
40:5–41:5 41:5–29		26	26 / [30]	V1.F30
41:29–52 41:53–42:21		[2]7	27 / [31]	V1.F31
42:21–43:3 43:3–22		28	28 / [32]	V1.F32
43:22–44:7 44:8–30		29	29 / 3[3]	V1.F33
44:31–45:18 45:18–46:14		30	30 / [34]	V1.F34
46:14–47:4 47:4–21		[3]1	31 / [3]5	V1.F35
47:21–48:12 48:12–49:11		[32]	32 / [36]	V1.F36
49:11–50:4 50:4–24	Ε = 5	33	33 / 37	V1.F37
Genesis / Exodus 50:25–26 / 1:1–15 1:15–2:14		[3]4	34 / 38	V1.F38
2:14–3:10 3:11–4:8		35	35 / [39]	V1.F39
4:8–31 5:1–21		[36]	36 / 40	V1.F40
5:22–6:25 6:25–7:18		37	37 / 4[1]	V1.F41
7:18–8:11 8:12–31		38	38 / 42	V1.F42

<sup>3</sup> The quire number is visible in the *Facsimile* but not in the *Reduced Facsimile*.

BOOK	QUIRE	ARABIC <sup>2</sup>	YOUNG	ABSOLUTE
8:31–9:2 9:22–10:8		39	39 / ٤٣	V1.F43
10:8–28 10:28–12:11		[40]	40 / [44]	V1.F44
12:11–29 12:29–13:5	٥ = 6	[41]	41 / [45]	V1.F45
13:5–14:5 14:5–24		[4]2	42 / 46	V1.F46
14:24–15:17 15:17–16:8		٤٣	43 / 47	V1.F47
16:8–32 16:32–18:1		[44]	44 / [48]	V1.F48
18:2–25 18:25–19:19		[45]	45 / [49]	V1.F49
19:19–20:20 20:20–21:20		[46]	46 / [5]0	V1.F50
21:20–22:6 22:6–23:2		[47]	47 / 51	V1.F51
23:2–23 23:23–24:11		[4]8	48 / 52	V1.F52
24:12–25:21 25:22–26:7	٧ = 7	[4]9	49 / 53	V1.F53
26:7–33 26:33–27:19		[50]	50 / 54	V1.F54
27:19–28:22 28:22–29:6		51	51 / 55	V1.F55
29:6–27 29:28–30:5		[5]٢	52 / 56	V1.F56
30:6–32 30:32–32:1		[53]	53 / 57	V1.F57
32:2–24 32:24–33:9		[54]	54 / [58]	V1.F58
33:10–34:10 34:10–31		[55]	55 / [59]	V1.F59
34:31–35:25 35:26–36:14		[56]	56 / ٦٠	V1.F60
36:14–37:2 37:3–38:10	٨ = 8	٥٧	57 / [61]	V1.F61
38:10–39:3 39:4–40:8		[58]	58 / [62]	V1.F62
Exodus 40:9–32 Leviticus 1:1–2:6		[59]	59 / [63]	V1.F63
2:6–3:16 3:16–4:20		60	60 / [64]	V1.F64
4:20–5:4 5:4–6:5		[61]	61 / [65]	V1.F65

BOOK	QUIRE	ARABIC <sup>2</sup>	YOUNG	ABSOLUTE
6:5–33 6:33–7:21		[62]	62 / 66	V1.F66
7:21–8:15 8:16–35		[63]	63 / 67 <sup>4</sup>	V1.F67
8:35–9:23 9:24–10:19		[6]4	64 / 68	V1.F68
10:19–11:28 11:29–12:5	Θ = 9	[65]	65 / [69]	V1.F69
12:5–13:20 13:20–41		[6]6	66 / 70	V1.F70
13:42–14:6 14:6–25		67	67 / 71	V1.F71
14:25–50 14:50–15:17		[6]8	68 / 72	V1.F72
15:18–16:4 16:4–23		69	69 / 73	V1.F73
16:23–17:8 17:8–18:17		[70]	70 / 74	V1.F74
18:17–19:14 19:15–20:2		[71]	71 / 75	V1.F75
20:2–24 20:24–21:21		72	72 / 76	V1.F76
21:21–22:21 22:22–23:18	Ι = 10	73	73 / [77]	V1.F77
23:18–43 23:44–25:6		[74]	74 / 78	V1.F78
25:6–31 25:31–26:1		[75]	75 / 79	V1.F79
26:1–26 26:26–27:3		[76]	76 / [80]	V1.F80
27:4–29 27:29–34		[77]	77 / 81	V1.F81
Numbers 1:1–29 1:30–51		[7]8	78 / 82	V1.F82
1:52–2:27 2:27–3:21		[7]9	79 / [83]	V1.F83
3:21–47 3:47–4:15		[80]	80 / [84]	V1.F84
4:16–37 4:37–5:15	ΙΑ = 11	[81]	81 / [85]	V1.F85
5:15–6:7 6:7–7:5		[8]2	82 / 86	V1.F86
7:5–31 7:31–72		83	83 / 87	V1.F87

<sup>4</sup> Since the UL corner is missing, the numbering is placed below the tear.

BOOK	QUIRE	ARABIC <sup>2</sup>	YOUNG	ABSOLUTE
7:73–8:10 8:10–9:7		[84]	84 / 88	V1.F88
9:8–10:10 10:10–11:5		[8]5	85 / 89	V1.F89
11:5–27 11:27–13:3		[86]	86 / 90	V1.F90
13:3–32 13:32–14:21		[8]7	87 / 91	V1.F91
14:22–44 14:44–15:24		88	88 / 92	V1.F92
15:25–16:9 16:9–36	<b>IB</b> = 12	[89]	89 / 93	V1.F93
16:36–17:9 17:9–18:17		[90]	90 / [94]	V1.F94
18:17–19:6 19:7–20:5		[91]	91 / 95	V1.F95
20:5–28 20:28–21:23		[92]	92 / 96	V1.F96
21:24–22:11 22:12–35		[93]	93 / [97]	V1.F97
22:35–23:19 23:19–24:17		[94]	94 / 98	V1.F98
24:17–26:3 26:4–39		[9]5	95 / 99	V1.F99
26:39–27:3 27:3–28:6		[96]	96 / 100	V1.F100
28:6–29:5 29:5–27	<b>[IF]</b> = 13	[97]	97 / 101	V1.F101
29:27–30:13 30:13–31:19		[98]	98 / 102	V1.F102
31:19–47 31:47–32:16		[9]9	99 / 103	V1.F103
32:16–39 32:39–33:34		[100]	100 / 104	V1.F104
33:35–34:6 34:6–35:7		[101]	101 / 105	V1.F105
35:8–31 35:31–36:15		[102]	102 / 106	V1.F106
Deuteronomy 1:1–22 1:22–44		[103]	103 / 107	V1.F107
1:44–2:21 2:22–3:3		[104]	104 / 108	V1.F108
3:4–26 3:26–4:17	<b>IA</b> = 14	[105]	105 / 109	V1.F109
4:17–39 4:39–5:16		[106]	106 / [110]	V1.F110

BOOK	QUIRE	ARABIC <sup>2</sup>	YOUNG	ABSOLUTE
5:16–6:7 6:7–7:5		[107]	107 / 111	V1.F111
7:5–24 7:25–9:1		[10]8	108 / 112	V1.F112
9:1–20 9:20–10:11		[10]9	109 / 113	V1.F113
10:11–11:12 11:12–12:1		[110]	110 / 114	V1.F114
12:1–21 12:21–13:8		[111]	111 / [115]	V1.F115
13:8–14:16 <sup>5</sup> 14:17–15:10		[112]	112 / 116	V1.F116
15:10–16:14 16:14–17:10	1e = 15	[113]	113 / 117	V1.F117
17:10–18:12 18:12–19:12		[114]	114 / 118	V1.F118
19:12–20:11 20:11–21:12		[115]	115 / 119	V1.F119
21:12–22:10 22:11–23:4		[116]	116 / 120	V1.F120
23:4–24:5 24:5–25:6		[117]	117 / 121	V1.F121
25:7–26:11 26:11–27:15		[11]8	118 / 122	V1.F122
27:15–28:17 28:18–45		[11]9	119 / 123	V1.F123
28:45–65 28:65–29:20		[120]	120 / 124	V1.F124
29:20–30:12 30:12–31:12	1ς = 16	[121]	121 / 125	V1.F125
31:12–29 31:29–32:29		[122]	122 / 126	V1.F126
32:29–33:3 33:3–34:1		[123]	123 / 127	V1.F127
34:1–12 (blank)		[124]	124 / [128]	V1.F128
Joshua 1:1–2:1 2:1–20	1ζ = 17	[1]25	125 / 129	V1.F129
2:20–3:15 3:15–4:16		[126]	126 / 130	V1.F130
4:16–5:10 5:10–6:17		[12]7	127 / 131	V1.F131

<sup>5</sup> Kenyon, who produced the first volume of the *Reduced Facsimile*, records the right-facing side ending with Deuteronomy 14:17 and the left-facing side beginning with 14:16; this has been corrected using the verse divisions in Rahlfs (Alfred Rahlfs, *Septuaginta*, 2d ed. [Stuttgart: Deutsche Bibelgesellschaft, 2006]).

BOOK	QUIRE	ARABIC <sup>2</sup>	YOUNG	ABSOLUTE
6:17–7:4 7:4–24		[12]8	128 / 132	V1.F132
7:24–8:19 8:19–9:1		[12]9	129 / 133	V1.F133
9:1–24 9:25–10:8		[130]	130 / 134	V1.F134
10:8–25 10:25–40		[131]	131 / 135	V1.F135
10:41–11:16 11:16–12:13		[132]	132 / 136	V1.F136
12:13–13:14 13:14–14:6		[13]3	133 / 137	V1.F137
14:6–15:9 15:9–47		[134]	134 / 138	V1.F138
15:48–17:2 17:2–18:3		[135]	135 / 139	V1.F139
18:3–23 18:24–19:29		[136]	136 / 140	V1.F140
19:29–20:4 20:4–21:14		[13]7	137 / 141	V1.F141
21:14–36 21:36–22:7		[1]38	138 / [142]	V1.F142
22:7–23 22:23–23:2		[13]9	139 / 143	V1.F143
23:2–24:4 24:4–20		[140]	140 / 144	V1.F144
Judges 24:20–33 1:1–17	<b>10</b> = 19	[14]1	141 / 145	V1.F145
1:17–34 1:34–2:17		[14]2	142 / 146	V1.F146
2:17–3:14 3:14–4:2		[143]	143 / 147	V1.F147
4:2–19 4:19–5:16		[144]	144 / 148	V1.F148
5:15–6:6 6:7–25		[1]45	145 / 149	V1.F149
6:25–7:2 7:2–15		[146]	146 / 150	V1.F150
7:16–8:7 8:8–25		[147]	147 / 151	V1.F151
8:26–9:8 9:9–28		148	148 / 152	V1.F152
9:29–49 9:49–10:13	<b>K</b> = 20	[14]9 <sup>6</sup>	149 / 153	V1.F153

<sup>6</sup> Only a vertical line is visible at the edge of the folio.

BOOK	QUIRE	ARABIC <sup>2</sup>	YOUNG	ABSOLUTE
10:13–11:16 11:16–34		[150]	150 / 154	V1.F154
11:34–12:12 12:13–13:19		[151]	151 / 155	V1.F155
13:19–14:12 14:12–15:7		[152]	152 / 156	V1.F156
15:8–16:4 16:4–18		[153]	153 / 157	V1.F157
16:18–17:3 17:3–18:9		[154]	154 / [158]	V1.F158
18:9–26 18:26–19:11		[155]	155 / [159]	V1.F159
19:11–28 19:28–20:16		[156]	156 / 160	V1.F160
20:16–35 20:35–21:7	<b>KA</b> = 21	[157]	157 / [161]	V1.F161
Ruth 21:8–25 1:1–20		[158]	158 / [162]	V1.F162
1:20–2:16 2:16–3:14		[159]	159 / [163]	V1.F163
3:14–4:11 4:11–22		[160]	160 / [164]	V1.F164
1 Samuel 1:1–20 1:20–2:11	<b>KB</b> = 22	[161]	161 / [165]	V1.F165
2:12–32 2:32–3:18		[162]	162 / [166]	V1.F166
3:18–4:15 4:15–5:8		[163]	163 / [167]	V1.F167
5:8–6:12 6:12–7:8		[164]	164 / 168	V1.F168
7:8–8:12 8:12–9:11		[165]	165 / 169	V1.F169
9:11–10:2 10:2–21		[166]	166 / 170	V1.F170
10:21–11:13 11:13–12:17		167	167 / 171	V1.F171
[blank] <sup>7</sup>			168	V1.F172
14:9–28 14:28–45	<b>KΓ</b> = 23	169	169 / [172]	V1.F173
14:45–15:13 15:13–35		[1]70	170 / 173	V1.F174
15:35–16:19 16:19–17:12			171 / 174	V1.F175

<sup>7</sup> This blank page is included in the *Reduced Facsimile*, but not in the *Facsimile*. There is a lacuna in the manuscript here.

BOOK	QUIRE	ARABIC <sup>2</sup>	YOUNG	ABSOLUTE
17:17–36 17:36–52			172 / 175	V1.F176
17:52–18:17 18:17–19:7			173 / 176	V1.F177
19:7–20:1 20:1–23			174 / 177	V1.F178
20:23–43 21:1–22:4			175 / 178	V1.F179
22:4–23 22:23–23:22			176 / 179	V1.F180
23:22–24:11 24:11–25:8	ΚΔ = 24		177 / 180	V1.F181
25:9–26 25:26–26:3			178 / [181]	V1.F182
26:3–20 26:20–28:1			179 / 182	V1.F183
28:2–21 28:21–30:2		[18]2	180 / 183	V1.F184
30:2–21 30:21–31:12		[183]	181 / 184	V1.F185
1 Samuel / 2 Samuel 31:12–13 / 1:1–12 1:12–2:9		[184]	182 / 185	V1.F186
2:9–29 2:30–3:20		[185]	183 / 186	V1.F187
3:20–39 3:39–5:6		[186]	184 / 187	V1.F188
5:6–6:6 6:6–7:6	ΚΕ = 25	[187]	185 / 188	V1.F189
7:6–27 7:28–9:3		[18]8 <sup>8</sup>	186 / 189	V1.F190
9:3–10:9 10:9–11:12		[18]9 <sup>9</sup>	187 / 190	V1.F191
11:12–12:4 12:4–25		190	188 / 191	V1.F192
12:25–13:15 13:15–34		[191]	189 / 192	V1.F193
13:34–14:17 14:17–15:1		[192]	190 / 193	V1.F194
15:2–23 15:23–16:8		[1]93	191 / 194	V1.F195
16:8–17:9 17:9–28		[19]4	192 / 195	V1.F196

<sup>8</sup> Only the vertical line of the last digit is visible at the edge of the page; the digit could thus be a 1, 8, or 9.

<sup>9</sup> Only a vertical line is visible at the edge of the folio.



BOOK	QUIRE	ARABIC <sup>2</sup>	YOUNG	ABSOLUTE
17:28–18:19 18:19–19:5	<b>K<math>\zeta</math></b> = 26	[195]	193 / [196]	V1.F197
19:5–21 19:22–41		[19]6	194 / 197	V1.F198
19:41–20:15 20:15–21:8		[19]7	195 / 198	V1.F199
21:8–22:4 22:4–40		[198]	196 / 199	V1.F200
22:40–23:16 23:16–24:9		[199]	197 / 200	V1.F201
24:9–25 24:25		[200]	198 / 201	V1.F202
1 Kings 1:1–20 1:20–39	<b>K<math>\zeta</math></b> = 27	[201]	199 / 202	V1.F203
1:39–2:3 2:3–20		[202]	200 / 203	V1.F204
2:20–33 2:33–37		[203]	201 / 204	V1.F205
2:37–3:7 3:7–26		[204]	202 / [205]	V1.F206
3:26–4:24 4:24–5:8		[20]5	203 / [206]	V1.F207
5:8–6:12 6:13–28		[20]6	204 / 207	V1.F208
6:28–34, 7:38–50 7:50, 1–16		[207]	205 / 208	V1.F209
7:16–33 7:33–37, 8:1–15		[208]	206 / [209]	V1.F210
8:15–31 8:31–46	<b>K<math>\eta</math></b> = 28	[209]	207 / 210	V1.F211
8:46–61 8:61–9:8		[21]0	208 / [211]	V1.F212
9:8–24 9:24–10:13		[21]1	209 / 212	V1.F213
10:13–11:1 11:1–20		[212]	210 / 213	V1.F214
11:20–37 11:37–12:10		[213]	211 / 214	V1.F215
12:10–27 12:27–13:9		[214]	212 / 215	V1.F216
13:9–29 13:29–14:10	see note <sup>10</sup>	[215]	213 / 216	V1.F217
14:10–28 14:28–15:18		[216]	214 / 217	V1.F218

<sup>10</sup> A *paragraphus* at the center upper edge of the page may suggest a quire number was above it before the page was trimmed.

BOOK	QUIRE	ARABIC <sup>2</sup>	YOUNG	ABSOLUTE
15:18–16:4 16:4–25		[217]	215 / 218	V1.F219
16:25–17:13 17:13–18:10		[218]	216 / 219	V1.F220
18:10–28 18:28–19:1		[219]	217 / 220	V1.F221
19:1–19 19:19–21, 21:1–15		[220]	218 / 221	V1.F222
21:15–33 21:33–43, 20:1–7		[221]	219 / 222	V1.F223
20:7–25 20:25–29, 22:1–17		[222]	220 / 223	V1.F224
22:17–36 22:36–54		[223]	221 / 224	V1.F225
2 Kings 1:1–15 1:15–2:12		[224]	222 / 225	V1.F226
2:12–3:8 3:9–4:1	ل = 30	[225]	223 / 226	V1.F227
4:1–23 4:24–41		[226]	224 / 227	V1.F228
4:41–5:15 5:15–6:6		[2]27	225 / 228	V1.F229
6:6–25 6:25–7:8		[228]	226 / 229	V1.F230
7:8–8:4 8:4–22		[229]	227 / 230	V1.F231
8:23–9:13 9:14–29		[230]	228 / 231	V1.F232
9:30–10:11 10:11–30		[231]	229 / 232	V1.F233
10:30–11:14 11:14–12:12		[2]32	230 / 233	V1.F234
12:12–13:10 13:10–14:6	ل = 31	[233]	231 / 234	V1.F235
14:6–26 14:26–15:20		[23]4	232 / [235]	V1.F236
15:20–16:3 16:3–17:1		235	233 / 236	V1.F237
17:1–21 17:21–40		[2]36	234 / 237	V1.F238
17:40–18:20 18:20–19:3		[23]7	235 / 238	V1.F239
19:3–25 19:25–20:10		[238]	236 / 239	V1.F240
20:10–21:8 21:8–22:3		[2]39	237 / 240	V1.F241

BOOK	QUIRE	ARABIC <sup>2</sup>	YOUNG	ABSOLUTE
22:3–23:2 23:2–16		[24]0	238 / 241	V1.F242
23:16–33 23:33–24:16	ⲕⲃ = 32	[2]41	239 / 242	V1.F243
24:16–25:19 25:19–30		[24]2	240 / 243	V1.F244
1 Chronicles 1:1–45 1:46–2:28	ⲕⲄ = 33	[24]3	241 / 244	V1.F245
2:29–3:14 3:15–4:25		[244]	242 / 245	V1.F246
4:25–5:15 5:15–6:28		[2]45	243 / 246	V1.F247
6:28–57 6:57–7:3		[24]6	244 / 247	V1.F248
7:3–34 7:34–9:1		[2]47	245 / 24[8]	V1.F249
9:1–32 9:32–11:1		[24]8	246 / 249	V1.F250
11:1–23 11:23–12:19		[24]9	247 / 250	V1.F251
12:19–13:6 13:6–15:7		[25]0	248 / 251	V1.F252
15:7–16:4 16:4–36	ⲕⲅ = 34	[251]	249 / 252	V1.F253
16:37–17:18 17:19–19:1		[252]	250 / 253	V1.F254
19:2–20:2 20:2–21:16		[25]3	251 / 254	V1.F255
21:16–22:9 22:9–23:23		[25]4	252 / 255	V1.F256
23:23–24:26 24:26–26:2		[255]	253 / 256	V1.F257
26:2–31 26:31–27:24		[25]6	254 / [257]	V1.F258
27:24–28:12 28:12–29:11		[257]	255 / 258	V1.F259
29:11–30 2 Chronicles 1:1–2:5		[2]58	256 / 259	V1.F260
2:6–3:8 3:8–4:13	ⲕⲆ = 35	[259]	257 / 260	V1.F261
4:13–5:13 5:13–6:20		[260]	258 / 261	V1.F262
6:20–36 6:37–7:14		[261]	259 / 262	V1.F263
7:14–8:14 8:14–9:17		[262]	260 / 263	V1.F264

BOOK	QUIRE	ARABIC <sup>2</sup>	YOUNG	ABSOLUTE
9:17–10:10 10:10–11:17		[26]3	261 / 264	V1.F265
11:18–12:16 13:1–14:2		[2]64	262 / 265	V1.F266
14:2–15:9 15:9–16:14		[265]	263 / 266	V1.F267
16:14–18:5 18:5–26		[26]6	264 / 267	V1.F268
18:27–20:1 20:1–23	ل٥ = 36	[2]٦7	265 / 268	V1.F269
20:23–21:8 21:8–22:7		[268]	266 / 269	V1.F270
22:7–23:13 23:13–24:11		[269]	267 / 270	V1.F271
24:11–25:4 25:4–21		[270]	268 / 271	V1.F272
25:21–26:15 26:15–28:4		[271]	269 / [272]	V1.F273
28:4–21 28:21–29:17		[27]2	270 / 273	V1.F274
29:17–36 29:36–30:19		[27]٣	271 / [274]	V1.F275
30:19–31:10 31:10–32:9		[2]74	272 / 275	V1.F276
32:9–28 32:28–33:14	ل٣ = 37	[275]	273 / [276]	V1.F277
33:14–34:9 34:9–28		[27]٦	274 / 277	V1.F278
34:28–35:13 35:13–26		[277]	275 / 278	V1.F279
35:27–36:13 36:14–23		[278]	276 / [279]	V1.F280

## Volume 2

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
[modern TOC] [blank]	n/a	n/a	n/a	V2.F1
Hosea 1:1–2:10 2:10–4:2	ل٨ = 38	[279]	277 / [2]	V2.F2
4:3–5:6 5:6–7:5		[2]80	278 / [3]	V2.F3
7:5–8:13 8:14–10:4		[28]1	279 / 4	V2.F4
10:4–11:10 11:10–13:7		282	280 / 5	V2.F5

BOOK		QUIRE	ARABIC	YOUNG	ABSOLUTE
Amos	13:8–14:10 1:1–2:4		[283]	281 / 6	V2.F6
	2:4–3:11 3:11–5:2		[2]84	282 / 7	V2.F7
	5:3–6:1 6:1–7:10		[2]85	283 / 8	V2.F8
	7:10–9:1 9:1–15		[28]6	284 / 9	V2.F9
Micah	1:1–2:7 2:7–4:1	[ <b>ΛΘ</b> ] = 39	[28]7	285 / [10]	V2.F10
	4:1–5:6 5:7–6:16		288	286 / 11	V2.F11
Joel	6:16–7:20 1:1–2:3		289	287 / 12	V2.F12
	2:4–25 2:25–3:16		290	[288] / 13	V2.F13
	Joel / Obadiah Obadiah / Jonah		291	[289] / 14	V2.F14
Jonah / Nahum	1:11–3:9 3:9–4:11 / 1:1–6		[292]	290 / 15	V2.F15
	1:6–3:2 3:2–19		[2]93	291 / 16	V2.F16
Habakkuk	1:1–2:5 2:5–3:8		294	292 / 17	V2.F17
Hab / Zephaniah	3:8–19 / 1:1–11 1:12–3:1	see note <sup>11</sup>	295	293 / 18	V2.F18
Haggai	3:1–20 1:1–2:7		[2]96	294 / 19	V2.F19
	2:7–23 1:1–21		297	295 / 20	V2.F20
Zechariah	2:1–4:1 4:1–5:10		[2]98	296 / 21	V2.F21
	5:11–7:7 7:7–8:12		299	297 / 22	V2.F22
	8:12–9:10 9:10–11:2		300	298 / 2[3]	V2.F23
	11:2–12:4 12:4–13:9		301	299 / 24	V2.F24
Zech / Malachi	13:9–14:18 14:18–21 / 1:1–10		[30]2	300 / 25	V2.F25
	1:10–2:14 2:14–3:17	[ <b>Ma</b> ] = 41	303	301 / [26]	V2.F26
Malachi / Isaiah	3:17–4:6 / 1:1–13 1:13–2:4		[30]4	302 / 27	V2.F27

<sup>11</sup> The quire number has been replaced with a drawing of perhaps a vase. Though the UL is missing, the UR has a cross feature typical of numbered quire pages.

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
2:4–3:8 3:8–4:5		[30]5	303 / 28	V2.F28
4:5–5:22 5:22–6:10		[30]6	304 / 29	V2.F29
6:10–7:20 7:21–8:19		307	305 / 30	V2.F30
8:19–9:17 9:17–10:18		[3]08	306 / 31	V2.F31
10:19–11:11 11:11–13:12		309	307 / 32	V2.F32
13:12–14:14 14:15–15:5		[31]0	308 / 33	V2.F33
15:6–17:6 17:6–19:3	<b>MB</b> = 42	311	309 / 34	V2.F34
19:3–20:1 20:1–22:1		312	310 / 35	V2.F35
22:2–25 23:1–24:8		[313]	311 / 36	V2.F36
24:8–25:11 25:11–27:3		314	312 / 37	V2.F37
27:3–28:11 28:11–29:5		315	313 / 38	V2.F38
29:5–30:1 30:1–21		[3]1[6]	314 / 39	V2.F39
30:21–31:6 31:6–33:3		[317]	315 / 40	V2.F40
33:3–34:2 34:2–35:9		318	316 / [41]	V2.F41
35:9–36:22 36:22–37:24	<b>MG</b> = 43	319	317 / [42]	V2.F42
37:24–38:12 38:12–40:5		320	318 / 43	V2.F43
40:6–41:4 41:4–42:1		[3]21	319 / 44	V2.F44
42:1–43:2 43:2–44:2		[322]	320 / 45	V2.F45
44:2–25 44:25–45:19		[3]23	321 / 46	V2.F46
45:19–47:5 47:6–48:13		324	322 / [47]	V2.F47
48:14–49:11 49:12–50:6		325	323 / 48	V2.F48
50:6–51:15 51:15–52:15		[326]	324 / [49]	V2.F49
52:15–54:11 54:12–56:4	<b>MA</b> = 44	[3]27	325 / [50]	V2.F50

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
56:4–57:15 57:15–58:12		[3]28	326 / 51	V2.F51
58:13–59:21 659:21–60:21		[329]	327 / 52	V2.F52
60:21–62:10 62:10–64:2		330	328 / 53	V2.F53
64:2–65:13 65:13–66:6		331	329 / 54	V2.F54
66:7–24 [blank]		[332]	330 / [55]	V2.F55
Jeremiah 1:1–2:8 2:9–33		[3]33	331 / 56	V2.F56
2:34–3:18 3:19–4:18		[3]34	332 / 57	V2.F57
4:19–5:10 5:10–6:4	<b>Me</b> = 45	[34]3 <sup>12</sup>	333 / 58	V2.F58
6:4–27 6:28–7:23		[34]4	334 / 59	V2.F59
7:23–8:8 8:8–9:11		[34]5	335 / 60	V2.F60
9:11–10:10 10:10–11:11		[346]	336 / [61]	V2.F61
11:11–12:8 12:8–13:13		[34]7	337 / 62	V2.F62
13:13–14:9 14:9–15:3		[348]	338 / 63	V2.F63
15:3–16:5 16:5–17:8		[3]49	339 / 64	V2.F64
17:8–27 18:1–22		[350]	340 / [65]	V2.F65
18:22–20:1 20:1–21:3	<b>[M.]</b>	335	341 / 66	V2.F66
21:3–22:8 22:8–23:2		[336]	342 / 67	V2.F67
23:3–26 23:26–24:6		[3]37	343 / 68	V2.F68
24:6–25:16 25:17–26:21		338	344 / 69	V2.F69
26:21–27:15 27:15–36		339	345 / 70	V2.F70
27:36–28:10 28:11–31		[3]40	346 / 71	V2.F71
28:31–59 28:59–29:16		[3]41	347 / 72	V2.F72

<sup>12</sup> Note the error in foliation for this quire (Arabic folios 343–350); see chapter 3 for an explanation.

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
29:16–30:10 30:11–31:19		[342]	348 / 73	V2.F73
31:19–32:4 32:5–33:3	-- <sup>13</sup>	[351]	349 / 74	V2.F74
33:3–20 33:20–34:16		[35]2	350 / 75	V2.F75
34:17–36:7 36:7–37:6		[353]	351 / 76	V2.F76
37:6–38:9 38:9–30		[354]	352 / 77	V2.F77
38:30–39:8 39:8–29		[3]55	353 / [78]	V2.F78
39:29–40:5 40:5–41:9		[3]56	354 / [79]	V2.F79
41:9–42:7 42:7–43:8		[357]	355 / [80]	V2.F80
43:8–27 43:28–44:15		[35]8	356 / 81	V2.F81
44:15–45:14 45:14–46:14	<b>MH</b> = 48	[359]	357 / 82	V2.F82
46:15–47:14 47:14–48:18		[3]60	358 / 83	V2.F83
48:18–49:21 49:22–51:6		[3]61	359 / 84	V2.F84
51:6–22 51:23–52:7		[36]2	360 / 85	V2.F85
52:7–31 Jeremiah / Baruch 52:31–34 / 1:1–10		[36]3	361 / 86	V2.F86
1:10–2:9 2:10–30		[3]64	362 / 87	V2.F87
2:30–3:23 3:23–4:15		[36]5	363 / 88	V2.F88
4:16–5:6 Baruch / Lam 5:7–9 / 1:1–6		[366]	364 / 89	V2.F89
1:6–19 1:20–2:11	<b>MΘ</b> = 49	[367]	365 / [90]	V2.F90
2:11–3:5 3:5–51		[36]8	366 / 91	V2.F91
3:51–4:13 4:14–5:19		[369]	367 / 92	V2.F92
Lam / Ep. of Jeremy <sup>14</sup> 5:19–22 / 6:1–12 6:12–36		[37]0	368 / 93	V2.F93

<sup>13</sup> A solid rectangle is just to the left of Young's leaf number, at the top edge of the page and what is possibly an ornament that typically sits beneath a cross trails off the upper right corner of the page; this is probably the beginning of a new quire.

<sup>14</sup> Kenyon provided the equivalent chapter and verses from Baruch.



BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
6:37–61 6:62–72		[371]	369 / 94	V2.F94
Ezekiel 1:1–23 1:23–3:6		[37]2	370 / 95	V2.F95
3:6–26 3:27–5:1		٣٧٣	371 / 96	V2.F96
5:1–6:3 6:3–7:7		[37]4	372 / 97	V2.F97
7:8–8:2 8:3–9:2	[N] = 50	[3]75	373 / 9[8]	V2.F98
9:2–10:9 10:9–11:9		[376]	374 / 99	V2.F99
11:9–12:6 12:6–28		[3]77	375 / 100	V2.F100
12:28–13:20 13:20–14:15		[3]78	376 / 101	V2.F101
14:15–16:5 16:6–27		٣٧٩	377 / [102]	V2.F102
16:27–46 16:46–17:4		[38]0	378 / [103]	V2.F103
17:4–22 17:22–18:17		٣٨١	379 / 104	V2.F104
18:17–19:4 19:4–20:9		[3]82	380 / 105	V2.F105
20:9–27 20:27–44	Na = 51	[38]3	381 / 106	V2.F106
20:44–21:17 21:17–22:5		[3]84	382 / 107	V2.F107
22:5–27 22:27–23:17		[3]85	383 / [108]	V2.F108
23:17–37 23:37–24:8		386	384 / [109]	V2.F109
24:8–25:3 25:3–26:6		387	385 / 110	V2.F110
26:6–27:3 27:3–25		٣٨٨	386 / 111	V2.F111
27:25–28:8 28:9–29:1		[3]89	387 / 112	V2.F112
29:1–19 29:20–30:21	NB = 52	[3]90	388 / 113	V2.F113
30:21–31:13 31:13–32:12		[3]91	389 / [114]	V2.F114
32:12–30 32:30–33:14		[3]92	390 / 115	V2.F115
33:14–34:1 34:1–19		[3]93	391 / 116	V2.F116

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
34:19–35:13 35:14–36:19		[39]4	392 / 117	V2.F117
36:20–37:2 37:2–22		[39]5	393 / 118	V2.F118
37:22–38:12 38:12–39:8		[39]6	394 / [119]	V2.F119
39:9–27 39:27–40:17		[397]	395 / 120	V2.F120
40:18–38 40:38–41:4	<b>NT</b> = 53	[39]8	396 / [121]	V2.F121
41:4–22 41:22–42:13		399	397 / [122]	V2.F122
42:14–43:9 43:10–25		400	398 / 123	V2.F123
43:25–44:15 44:15–45:1		[401]	399 / [124]	V2.F124
45:1–18 45:18–46:9		402	400 / 125	V2.F125
46:9–47:2 47:2–20		403	401 / 126	V2.F126
47:20–48:16 48:16–35		[404]	402 / 127	V2.F127
Susanna 1–26 26–52		[405]	403 / [128]	V2.F128
Susanna / Daniel 52–64 / 1:1–5 1:5–21	<b>NA</b> = 54	[40]6	404 / 129	V2.F129
2:1–20 2:20–38		407	405 / 130	V2.F130
2:39–3:3 3:3–20		[40]8	406 / [131]	V2.F131
3:20–44 3:45–72		409	407 / [132]	V2.F132
3:73–95 3:95–4:13		[4]10	408 / [133]	V2.F133
4:13–23 4:23–5:7		[411]	409 / 134	V2.F134
5:7–23 5:23–6:10		[412]	410 / [135]	V2.F135
6:10–25 6:26–7:8		[413]	411 / 136	V2.F136
7:8–27 7:28–8:17	<b>NE</b> = 55	[414]	412 / [137]	V2.F137
8:17–9:10 9:10–25		[415]	413 / [138]	V2.F138
9:26–10:13 10:13–11:11		[41]6	414 / [139]	V2.F139

	BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
	11:11–30 11:30–12:4		417	415 / 140	V2.F140
Dan /Bel & the Dragon	12:4–13 / 1–11 11–34		[41]8	416 / 141	V2.F141
	34–42 [blank] <sup>15</sup>		[419]	417 / 142	V2.F142
Esther	[A=11:2–12:6], 1:1–8 1:8–2:8	<b>NS</b> = 56	[420]	418 / 143	V2.F143
	2:8–3:5 3:5–13, [B=13:1–7], 3:14		[4]21	419 / 144	V2.F144
	3:14–4:17, [C=13:8– 12] [C=13:12–14:19]		[4]22	420 / 145	V2.F145
	[C=14:19, D=15:1– 16], 5:3–14 5:14–7:8		423	421 / 146	V2.F146
	7:8–6:12, [E=16:1–5] [E=16:5–24], 8:13–15		424	422 / 147	V2.F147
	8:15–9:25 9:25–[11:1]		[425]	423 / 14[8]	V2.F148
Tobit	1:1–22 1:22–3:8		[42]6	424 / 149	V2.F149
	3:8–4:12 4:12–5:14		[42]7	425 / 150	V2.F150
	5:14–6:15 6:15–7:17	<b>NZ</b> = 57	[428]	426 / [151]	V2.F151
	7:17–10:4 10:4–11:17		[429]	427 / [152]	V2.F152
	11:17–13:4 13:4–14:5		[4]30	428 / 153	V2.F153
Tobit / Judith	14:5–15 / 1:1–9 1:9–2:13		[43]1	429 / 154	V2.F154
	2:13–3:8 3:8–5:3		[432]	430 / 155	V2.F155
	5:3–6:1 6:1–21		[433]	431 / 156	V2.F156
	6:21–7:18 7:19–8:7		[43]4	432 / 157	V2.F157
	8:7–27 8:27–9:12		[435]	433 / 158	V2.F158
	9:12–10:17 10:17–11:13	<b>NH</b> = 58	[43]6	434 / 159	V2.F159
	11:13–12:10 12:11–13:10		[4]37	435 / [160]	V2.F160

<sup>15</sup> The note studied by Mercati occurs here.

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
13:10–14:5 14:5–15:5		[4]38	436 / 161	V2.F161
15:5–16:11 16:11–25		[43]9	437 / [162]	V2.F162
1 Esdras 1:1–21 (23) 1:21 (23)–43 (45)	<b>№</b> = 59	[4]40	438 / 163	V2.F163
1:43 (45)–2:9 (10) 2:9 (10)–25 (30)		441	439 / 164	V2.F164
2:25 (30)–4:2 4:2–28		442	440 / 165	V2.F165
4:28–49 4:49–5:9		[443]	441 / 166	V2.F166
5:9–38 5:38–56 (58)		[444]	442 / 167	V2.F167
5:56 (58)–6:6 6:6–24 (25)		[44]5	443 / 168	V2.F168
6:24 (25)–7:11 7:11–8:19 (21)		[44]6	444 / 169	V2.F169
8:19 (21)–8:45 (47) 8:45 (47)–8:66 (69)		[4]47	445 / 170	V2.F170
8:66 (69)–87 (91) 8:87 (91)–9:22	<b>ⲫ</b> <sup>16</sup> = 60	[4]48	446 / 171	V2.F171
9:22–51 (52) 9:51 (52)–55 / 1:1–11		[449]	447 / 172	V2.F172
1 Esd / 2 Esdras <sup>17</sup> 1:11–2:61 2:61–3:11		[450]	448 / 173	V2.F173
3:11–4:17 4:17–5:13		[451]	449 / 174	V2.F174
5:14–6:14 6:14–7:17		[4]52	450 / 175	V2.F175
7:17–8:15 8:15–36		[453]	451 / 176	V2.F176
8:36–10:1 10:1–10:22		[454]	452 / 177	V2.F177
10:22–11:11 11:11–12:20		[455]	453 / 178	V2.F178
12:20–13:26 13:26–14:18	<b>ⲫα</b> <sup>18</sup> = 61	[456]	454 / 179	V2.F179
14:18–15:15 15:15–16:19		[457]	455 / 180	V2.F180
16:19–17:49 17:50–18:6		[458]	456 / 181	V2.F181

<sup>16</sup> This quire number appears to have been added by a later hand; the ⲫ has an appearance foreign to the other quire numbers.

<sup>17</sup> 2 Esdras = Ezra + Nehemiah.

<sup>18</sup> Note the shift to a minuscule alpha in this and subsequent quire numbers.

BOOK		QUIRE	ARABIC	YOUNG	ABSOLUTE
18:6–19:6 19:6–24			[4]59	457 / [182]	V2.F182
19:24–20:1 20:1–20:39			[460]	458 / 183	V2.F183
20:39–22:14 22:22–23:2			[461]	459 / 184	V2.F184
23:2–21 23:21–31			[462]	460 / 185	V2.F185
<i>missing leaf</i>					
1 Maccabees	1:1–23 1:23–51	𐤆𐤁 = 62	[4]64 <sup>19</sup>	470 / 186	V2.F186
	1:51–2:16 2:17–2:39		[465]	471 / 187	V2.F187
	2:39–66 2:66–3:20		[466]	472 / [188]	V2.F188
	3:20–3:40 3:40–4:2		[46]7	473 / [189]	V2.F189
	4:2–28 4:28–50		[468]	474 / 190	V2.F190
	4:50–5:7 5:7–27		[46]9	475 / 191	V2.F191
	5:27–45 5:45–68		[470]	476 / 192	V2.F192
	5:68–6:21 6:22–42		[471]	477 / 193	V2.F193
	6:42–62 6:62–7:19	𐤆𐤂 = 63	[472]	478 / 194	V2.F194
	7:19–41 7:41–8:10		[473]	479 / 195	V2.F195
	8:10–30 8:30–9:16		[4]74	480 / 196	V2.F196
	9:16–40 9:40–60		[47]5	481 / 197	V2.F197
	9:60–10:8 10:8–31		[476]	482 / 198	V2.F198
	10:31–47 10:47–67		[47]7	483 / 199	V2.F199
	10:67–88 10:88–11:20		[478]	484 / 200	V2.F200
	11:20–38 11:38–57		[479]	485 / 201	V2.F201
	11:57–12:4 12:4–27	𐤆𐤃 = 64	[480]	486 / [202]	V2.F202

<sup>19</sup> There appears to have been an additional folio between 2 Esdras and 1 Maccabees at the time of the Arabic folio numbering; note that the previous quire has only 7 leaves, though its neighbors all have 8.

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
12:27–48 12:48–13:18		[48]1	487 / 203	V2.F203
13:19–42 13:42–14:8		[482]	488 / 204	V2.F204
14:9–29 14:29–47		[4]83	489 / 205	V2.F205
14:47–15:21 15:21–40		[48]4	490 / 206	V2.F206
15:40–16:16 1 Macc / 2 Macc 16:16–24 / 1:1–11		[485]	491 / 207	V2.F207
1:11–32 1:32–2:18		[48]6	492 / 208	V2.F208
2:18–3:5 3:5–24		[487]	493 / 209	V2.F209
3:24–4:2 4:2–21	ⲫⲉ = 65	[48]8	494 / 210	V2.F210
4:21–39 4:39–5:6		[489]	495 / 211	V2.F211
5:6–24 5:24–6:15		[49]0	496 / 212	V2.F212
6:15–7:1 7:1–21		[491]	497 / 213	V2.F213
7:21–8:1 8:1–18		[492]	498 / 214	V2.F214
8:18–35 8:35–9:13		[493]	499 / 215	V2.F215
9:14–10:3 10:3–21		[49]4	500 / 216	V2.F216
10:21–38 10:38–11:19		[495]	501 / 217	V2.F217
11:20–12:4 12:4–21	ⲫⲓⲥ = 66	[496]	502 / 218	V2.F218
12:21–39 12:39–13:11		[4]97	503 / 219	V2.F219
13:12–14:4 14:4–23		498	504 / 220	V2.F220
14:23–43 14:43–15:16		[499]	505 / 221	V2.F221
15:16–35 2 Macc / 3 Macc 15:35–39 / 1:1–7		[500]	506 / 222	V2.F222
1:8–26 1:27–2:18		[501]	507 / 223	V2.F223
2:19–3:1 3:2–19		[502]	508 / 224	V2.F224
3:20–4:4 4:5–18	ⲫⲓ = 67	[503]	509 / 225	V2.F225

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
4:19–5:18 5:18–39		[504]	510 / 226	V2.F226
5:39–6:4 6:4–24		[505]	511 / 227	V2.F227
6:24–41 6:41–7:16		[506]	512 / 228	V2.F228
3 Macc / 4 Macc 7:16–23 / 1:1–11 1:11–35		[507]	513 / 229	V2.F229
2:1–24 3:1–4:3		[508]	514 / 230	V2.F230
4:3–26 4:26–5:23		[509]	515 / 231	V2.F231
5:23–6:14 6:15–7:5		[510]	516 / 232	V2.F232
7:5–8:5 8:5–29	ⲫⲏ = 68	[511]	517 / (233)	V2.F233
9:1–24 9:25–10:17		[512]	518 / (234)	V2.F234
10:17–12:1 12:1–13:9		[513]	519 / 235	V2.F235
13:9–14:6 14:7–15:10		[514]	520 / 236	V2.F236
15:10–16:1 16:2–17:1		[515]	521 / 237	V2.F237
17:2–18:5 18:5–24		[516]	522 / 238	V2.F238

### Volume 3

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
[blank] [modern TOC]		n/a	-- / 1	V3.F1
Ep. to Marcellinus 1–4 4–6	ⲫⲏ = 69	[517]	523 / 2	V3.F2
6–8 8–10		[518]	524 / 3	V3.F3
10–11 11–13		519	525 / 4	V3.F4
13–15 15–17		[520]	526 / 5	V3.F5
17–20 20–22		[521]	527 / 6	V3.F6
22–25 25–28		[522]	528 / 7	V3.F7
28–30 30–32		[523]	529 / 8	V3.F8

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
32–33 [blank]		[524]	530 / 9	V3.F9
Hypotheses of Pss Periochae Ps. 1–62	<b>O</b> = 70	[525] <sup>20</sup>	531 / 10	V3.F10
Ps. 62–115 Periochae / Canons Ps. 117–150		[526]	532 / 11	V3.F11
Psalms 1:1–4:3 4:3–6:9		[527]	533 / 12	V3.F12
6:9–8:7 8:7–9:25(10:4)		[528]	534 / 13	V3.F13
9:25(10:4)–11(12):5 11(12):5–15(16):3		[529]	535 / 14	V3.F14
15(16):3–16 (17):15 17(18):1–27		[530]	536 / 15	V3.F15
17(18):27–18(19):7 18(19):7–20(21):10		[531]	537 / 16	V3.F16
20(21):10–21(22):26 21(22):26–24(25):2		[532]	538 / 17	V3.F17
24(25):2–25(26):11 25(26):12–27(28):8	<b>Oα</b> = 71	[533]	539 / 18	V3.F18
27(28):8–30(31):6 30(31):7–31(32):7		[53]4	540 / 19	V3.F19
31(32):7–33(34):4 33(34):5–34(35):10		[535]	541 / [20]	V3.F20
34(35):10–35(36):10 35(36):10–36(37):25		[53]6	542 / 21	V3.F21
36(37):25–37(38):12 37(38):13–39(40):3		[537]	543 / 22	V3.F22
39(40):3–40(41):9 40(41):9–42(43):5		[5]38	544 / 23	V3.F23
43(44):1–44(45):2 44(45):2–45(46):12		[539]	545 / 24	V3.F24
45(46):12–48(49):12 48(49):12–49(50):19		[540]	546 / 25	V3.F25
<i>lacuna</i>				
79(80):11–81(82):8 81(82):8–84(85):2		[550]	547 / 26	V3.F26
84(85):2–86(87):3 86(87):4–88(89):8		[551]	548 / 27	V3.F27
88(89):8–42 88(89):43–90(91):3		[552]	549 / 28	V3.F28

<sup>20</sup> It is difficult to tell if there is the remnant of a page number in the lower left corner of the left-facing side of this folio.



BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
90(91):4–92(93):4 92(93):4–94(95):9		[553]	550 / 29	V3.F29
94(95):10–96(97):12 97(98):1–100(101):5		[554]	551 / 30	V3.F30
100(101):5– 101(102):27 101(102):27– 103(104):5		[55]5	552 / 31	V3.F31
103(104):5–104(105):2 104(105):3–38		[556]	553 / 32	V3.F32
104(105):39–105(106)- 25 105(106):25– 106(107):11	OE = 74	[557]	554 / 33	V3.F33
106(107):11–43 107(108):1– 108(109):18		[558]	555 / 34	V3.F34
108(109):19– 110(111):10 111(112):1– 113:18(115:10)		559	556 / [35]	V3.F35
113:18(115:10)- 117(118):12 117(118):12– 118(119):21		[56]0	557 / 36	V3.F36
118(119):21–60 118(119):61–96		[561]	558 / 37	V3.F37
118(119):96–133 118(119):134–174		[562]	559 / 38	V3.F38
118(119):175– 124(125):1 124(125):1–129(130):3		[5]63	560 / 39	V3.F39
129(130):3–133(134):3 133(134):3– 135(136):15		[564]	561 / 40	V3.F40
135(136):16– 138(139):7 138(139):7–140(141):1	OE = 75	[565]	562 / 41	V3.F41
140(141):2– 142(143):10 142(143):10– 144(145):14		[56]6	563 / 42	V3.F42
144(145):14–147:7(18) 147:7(18)-151:7		[567]	564 / 43	V3.F43
Canticles 1:1–2:9 2:10–36		[568]	565 / 44	V3.F44

	BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
	2:36–4:10 4:10–6:8		[569]	566 / 45	V3.F45
	6:8–8:1 8:2–9:35		[570]	567 / 46	V3.F46
	9:35–10:65 10:66–11:53		[571]	568 / 47	V3.F47
	11:53–14:39 14:40–46		[572]	569 / [48]	V3.F48
Job	1:1–17 1:17–2:11	OS = 76	[5]73	570 / 49	V3.F49
	2:11–4:2 4:3–5:14		[574]	571 / 50	V3.F50
	5:14–6:21 6:22–8:3		[575]	572 / 51	V3.F51
	8:4–9:19 9:19–11:2		[576]	573 / 52	V3.F52
	11:2–12:21 12:22–14:8		[577]	574 / 53	V3.F53
	14:8–15:23 15:23–17:3		[578]	575 / 54	V3.F54
	17:4–19:7 19:8–20:14		[579]	576 / 55	V3.F55
	20:15–21:20 21:21–22:23		[580]	577 / [56]	V3.F56
	22:23–24:12 24:13–24:11	OZ = 77	[5]81	578 / 57	V3.F57
	24:11–28:7 28:8–29:18		[582]	579 / 58	V3.F58
	29:19–30:27 30:27–31:29		[58]3	580 / 59	V3.F59
	31:29:32:19 32:19–33:30		[584]	581 / 60	V3.F60
	33:31–34:33 34:33–36:16		[585]	582 / 61	V3.F61
	36:16–37:22 37:22–38:41		[586]	583 / 62	V3.F62
	38:41–40:6 (11) 40:6(11)-41:16(17)		[587]	584 / 63	V3.F63
	41:17(18)-42:16		[588]	585 / 64	V3.F64
Job / Proverbs	42:16–17e / 1:1–18				
	1:19–2:19 2:19–3:31	QH <sup>21</sup> = 78	[5]89	586 / 65	V3.F65

<sup>21</sup> No part of the quire number is visible; four dots appear at the center top margin, the outermost two likely representing the bottom of two crosses flanking the quire number. In the upper right corner of the page the bottom of another cross (if there is any pattern to quire pages) is visible.

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
3:31–5:4 5:5–6:11		[590]	587 / [66]	V3.F66
6:11–7:11 7:11–8:20		[591]	588 / 67	V3.F67
8:20–9:12c 9:12c–10:28		[592]	589 / 68	V3.F68
10:28–12:1 12:1–13:5		[59]2 <sup>22</sup>	590 / 69	V3.F69
13:5–14:8 14:8–15:6		[593]	591 / 70	V3.F70
15:6–16:9(4) 16:10–17:8		[594]	592 / 71	V3.F71
17:8–18:11 18:12–19:20(23)		[595]	593 / 72	V3.F72
19:21(24)–21:11 21:11–22:16	ΘΘ = 79	[596]	594 / 73	V3.F73
22:16–23:24 23:25–24:22e		[597]	595 / 74	V3.F74
24:22e–54(30:19) 24:54(30:19)–25:10a		[598]	596 / 75	V3.F75
25:11–26:16 26:16–27:21a		[599]	597 / 76	V3.F76
27:21a–28:28 29:1–37(31:19)		[600]	598 / 77	V3.F77
Prov / Ecclesiastes 29:38(31:20)–49(31:31) / 1:1–13 1:13–2:16		[601]	599 / 78	V3.F78
2:16–3:14 3:14–4:13		[602]	600 / 79	V3.F79
4:13–5:19 5:19–7:16(15)		[603]	601 / 80	V3.F80
7:16(15)–8:11 8:11–9:9	Π = 80	[604]	602 / 81	V3.F81
9:9–10:17 10:17–12:5		[605]	603 / 82	V3.F82
Eccl / Song of Songs <sup>23</sup> 12:5–14 / 1:1–10 1:11–3:2		[606]	604 / 83	V3.F83
3:2–4:12 4:12–6:1(2)		[607]	605 / 84	V3.F84
4:2(3)–8:2 8:2–14		[60]8	606 / 85	V3.F85
Wisdom 1:1–2:4 2:5–3:7		[609]	607 / 86	V3.F86

<sup>22</sup> An error in numeration occurs in this quire; see Chapter 3 for an explanation.

<sup>23</sup> The intervention regarding sin occurs at the bottom of this page.

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
3:8–4:14 4:15–5:17(18)		[610]	608 / 87	V3.F87
5:17(18)-6:22(24) 6:23(25)-7:24		[611]	609 / 88	V3.F88
7:24–8:18 8:18–10:5	Πα = 81	[612]	610 / 89	V3.F89
10:5–11:12(13) 11:12(13)-12:11		[613]	611 / 90	V3.F90
12:12–13:6 13:7–14:10		[6]14	612 / 91	V3.F91
14:11–15:2 15:3–16:3		[615]	613 / 92	V3.F92
16:3–25 16:25–17:18(17)		[616]	614 / 93	V3.F93
17:18(17)-18:19 18:19–19:16(15)		[617]	615 / 94	V3.F94
Wisdom / Ecclesiasticus 19:16(15)-22 / Prologue 1:1–2:7		[618]	616 / 95	V3.F95
2:7–3:23(24) 3:23(25)-4:22(26)		[619]	617 / 96	V3.F96
4:22(27)-6:10 6:11–7:4	ΠΒ = 82	620	618 / 97	V3.F97
7:4–36(40) 7:36(40)-9:9(13)		[621]	619 / 98	V3.F98
9:9(13)-10:17(20) 10:17(20)-11:12(13)		622	620 / 99	V3.F99
11:13–12:9 12:10–13:13(16)		[623]	621 / 100	V3.F100
13:15(19)-14:17(12) 14:17(12)-16:1(15:22)		[624]	622 / 101	V3.F101
16:1–30(31) 16:30(31)-18:1		[625]	623 / 102	V3.F102
18:2–19:1 19:1–20:10		[6]2[6]	624 / 103	V3.F103
20:11–21:7(8) 21:8(9)-22:11(10)		[627]	625 / 104	V3.F104
22:11–23:10(11) 23:10(11)-24:7(11)	ΠΓ = 83	[628]	626 / 105	V3.F105
24:8(12)-25:7(9) 25:7(9)-26:12(15)		[629]	627 / 106	V3.F106
26:12(15)-27:23(26) 27:23(26)-28:23(27)		[630]	628 / 107	V3.F107
28:23(27)-29:27(34) 29:27(34)-30:32(33:24)		[631]	629 / 108	V3.F108
30:33(33:25)- 31:30(34:30) 31:31(34:31)-34:2(31:2)		[632]	630 / 109	V3.F109

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
34:2(31:2)-35:1(32:2) 35:2(32:2)-36:13(33:14)		[63]3	631 / 110	V3.F110
36:13(33:14)-37:11(14) 37:11(14)-38(14)		[634]	632 / 111	V3.F111
38:14-39:1 39:2-26(31)		[635]	633 / 112	V3.F112
39:26(31)-40:22 40:23-41:19(24)	ΠΔ = 84	[6]36	634 / 113	V3.F113
41:19(24)-42:23(24) 42:24(25)-43:31(35)		[637]	635 / 114	V3.F114
43:32(36)-45:4 45:4-24(30)		[638]	636 / 115	V3.F115
45:24(30)-47:3 47:3-48:6		[639]	637 / 116	V3.F116
48:6-49:8(10) 49:9(11)-50:21(23)		[640]	638 / 117	V3.F117
50:21(23)-51:19(26) 51:19(26)-51:30(38)		[641]	639 / 118	V3.F118

### New Testament Table of Concordance

This table, for the fourth volume of the codex, follows the same format as the Old Testament Table of Concordance.

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
[blank] [Modern TOC]	n/a	n/a		V4.F1
Matthew 25:6-35 25:35-26:19		(668)	26 / (2)	V4.F2
26:19-46 26:46-73		(669)	27 / (3)	V4.F3
26:73-27:28 27:28-58		(670)	28 / 4	V4.F4
27:58-28:19 28:19-20; TOC Mark		(671)	29 / 5	V4.F5
Mark 1:1-30 1:30-2:13		(672)	30 / 6	V4.F6
2:14-3:8 3:8-4:3		(673)	31 / 7	V4.F7
4:3-32 4:32-5:19		(674)	32 / 8	V4.F8

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
5:20–6:3 6:3–27	Πθ = 89	(675)	33 / (9)	V4.F9
6:27–54 6:54–7:23		(676)	34 / (10)	V4.F10
7:24–8:14 8:15–9:2		(677)	35 / [11]	V4.F11
9:2–29 9:29–10:5		(678)	36 / 12	V4.F12
10:5–32 10:32–11:7		(679)	37 / 13	V4.F13
11:7–33 11:33–12:25		[..]9?	38 / 14	V4.F14
12:25–13:5 13:5–32		(681)	39 / 15	V4.F15
13:32–14:23 14:23–49		(682)	40 / 16	V4.F16
14:50–15:5 15:6–36	ϑ = 90	(683)	41 / 17	V4.F17
15:37–16:16 16:17–20		(684)	42 / 18	V4.F18
Luke TOC Luke TOC Luke		(685)	43 / 19	V4.F19
1:1–27 1:27–59		(686)	44 / 20	V4.F20
1:59–2:11 2:11–38		(687)	45 / [21]	V4.F21
2:38–3:11 3:11–4:3		(688)	46 / 22	V4.F22
4:3–29 4:30–5:9		(689)	47 / 23	V4.F23
5:9–32 5:32–6:17		(690)	48 / 24	V4.F24
6:17–42 6:42–7:16		(691)	49 / 25	V4.F25
7:16–39 7:39–8:14		(692)	50 / 26	V4.F26
8:14–35 8:36–9:5		(693)	51 / 27	V4.F27
9:6–27 9:28–49	ϑα = 91	(694)	52 / 28	V4.F28
9:49–10:13 10:13–36		[69]5	53 / 29	V4.F29
10:36–11:18 11:18–42		(696)	54 / 30	V4.F30
11:42–12:10 12:10–38		(697)	55 / 31	V4.F31

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
12:38–13:4 13:4–28		(698)	56 / [32]	V4.F32
13:28–14:17 14:17–15:7		(699)	57 / [33]	V4.F33
15:7–16:1 16:1–24		(700)	58 / 34	V4.F34
16:24–17:16 17:17–18.8		(701)	59 / 35	V4.F35
18:9–36 18:36–19:23	قٲ = 92	[70]2	60 / 36	V4.F36
19:23–20:6 20:6–35		[70]3	61 / 37	V4.F37
20:25–21:21 21:21–22:12		٧04	62 / 38	V4.F38
22:12–42 22:42–23:3		[70]5	63 / 39	V4.F39
23:3–33 23:33–24:5		[70]6	64 / 40	V4.F40
24:5–32 24:32–53		[7]07	65 / 41	V4.F41
John TOC John; 1–18 1:19–44		708	66 / 42	V4.F42
1:45–2:18 2:19–3:19		[7]09	67 / 43	V4.F43
3:20–4:13 4:13–41	(قٲ) = 93	(710)	68 / 44	V4.F44
4:42–5:14 5:14–40		٧11	69 / 45	V4.F45
5:40–6:22 6:22–50		(712)	70 / 46	V4.F46
<i>lacuna</i>				
8:52–9:19 9:19–10:7		(715)	73 / 47	V4.F47
10:7–38 10:38–11:30		٧16	74 / 48	V4.F48
11:30–57 11:57–12:27		[7]17	75 / 49	V4.F49
12:28–13:5 13:5–36		(718)	76 / 50	V4.F50
13:36–14:28 14:28–15:26		[7]19	77 / 51	V4.F51
15:26–16:29 16:29–17:24		(720)	78 / 52	V4.F52
17:25–18:25 18:25–19:10		(721)	79 / 53	V4.F53
19:10–36 19:36–20:20		(722)	80 / 54	V4.F54

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
20:20–21:15 21:15–25		(723)	81 / 55	V4.F55
Acts 1:1–24 1:24–2:23		[72]4	82 / 56	V4.F56
2:23–3:2 3:3–4:3		(725)	83 / 57	V4.F57
4:4–31 4:31–5:21	qe = 95	[72]6	84 / 58	V4.F58
5:21–6:3 6:3–7:14		(727)	85 / 59	V4.F59
7:14–42 7:42–8:10		(728)	86 / 60	V4.F60
8:10–39 8:39–9:27		(729)	87 / 61	V4.F61
9:27–10:10 10:11–36		(730)	88 / 62	V4.F62
10:37–11:16 11:16–12:10		(731)	89 / 63	V4.F63
12:10–13:7 13:7–32		(732)	90 / 64	V4.F64
13:33–14:8 14:8–15:4		(733)	91 / 65	V4.F65
15:4–30 15:30–16:15	qs = 96	734	92 / [66]	V4.F66
16:15–38 16:39–17:20		(735)	93 / 67	V4.F67
17:20–18:12 18:12–19:10		[73]6	94 / 68	V4.F68
19:10–33 19:33–20:16		(737)	95 / 69	V4.F69
20:17–21:5 21:5–27		(738)	96 / 70	V4.F70
21:27–22:10 22:10–23:6		(739)	97 / 71	V4.F71
23:6–27 23:28–24:21	qz = 97	740	98 / 72	V4.F72
24:22–25:15 25:16–26:11		[7]41	99 / 73	V4.F73
26:11–27:3 27:3–28		[7]42	100 / 74	V4.F74
27:29–28:7 28:8–30		743	101 / 75	V4.F75
Acts / James 28:30–31 / 1:1–5 1:16–2:14		744	102 / 76	V4.F76
2:15–3:16 3:17–5:8		[7]45	103 / 77	V4.F77



BOOK		QUIRE	ARABIC	YOUNG	ABSOLUTE
James / 1 Peter	5:8–20 / 1:1–13 1:13–2:16		746	104 / 78	V4.F78
	2:16–3:16 3:16–5:1		747	105 / 79	V4.F79
1 Peter / 2 Peter	5:1–14 / 1:1–14 1:15–2:16	QH = 98	[7]48	106 / 80	V4.F80
2 Peter / 1 John	2:16–3:16		[7]49	107 / 81	V4.F81
	3:16–18 / 1:1–2:9				
	2:9–3:5 3:5–4:4		750	108 / 82	V4.F82
1 John / 2 John	4:4–5:9		[7]51	109 / 83	V4.F83
	5:9–21 / 1–13				
3 John / Jude	1–15 / 1–12 12–25		[7]52	110 / 84	V4.F84
Romans	1:1–27		[7]53	111 / 85	V4.F85
	1:28–2:26				
	2:26–3:31 4:1–5:3		754	112 / 86	V4.F86
	5:3–6:9 6:10–7:13		(755)	113 / 87	V4.F87
	7:13–8:20 8:20–9:11	QH = 99	(756)	114 / 88	V4.F88
	9:12–10:10 10:10–11:20		757	115 / 89	V4.F89
	11:20–12:14 12:15–14:8		758	116 / 90	V4.F90
	14:8–15:11 15:11–16:4		[7]59	117 / 91	V4.F91
1 Corinthians	16:4–27		[7]80 <sup>24</sup>	118 / 92	V4.F92
	1:1–30				
	1:31–3:11 3:13–4:18		[7]81	119 / 93	V4.F93
	4:18–6:18 6:18–7:30		(782)	120 / [94]	V4.F94
	7:30–9:6 9:7–10:8		783	121 / 95	V4.F95
	10:8–11:6 11:6–12:3	[see note] <sup>25</sup>	784	122 / [96]	V4.F96
	12:3–13:3 13:4–14:20		785	123 / 97	V4.F97
	14:21–15:12 15:12–44		[7]86	124 / 98	V4.F98
1 Cor / 2 Cor	15:44–16:15 16:15–24 / 1:1–16		[7]87	125 / [99]	V4.F99

<sup>24</sup> Note the error in folio numeration here; see Chapter 3 for the explanation.

<sup>25</sup> A peculiar “note” is drawn over a red smear where a quire number might be expected.

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
1:16–3:5 3:5–4:13		788	126 / 100	V4.F100
<i>lacuna</i>				
2 Cor / Galatians	12:7–13:9 13:9–13 / 1:1–14 $\text{Pa}$ = 101	[7]92	127 / 101	V4.F101
	1:15–2:17 2:17–3:24	(793)	128 / 102	V4.F102
	3:24–4:30 4:30–6:7	794	129 / 103	V4.F103
Galatians / Ephesians	6:8–18 / 1:1–14 1:14–2:16	[79]5	130 / 104	V4.F104
	2:16–4:4 4:4–32	(796)	131 / 105	V4.F105
	5:1–33 5:33–6:24	797	132 / 106	V4.F106
Philippians	1:1–29 1:29–2:30	798	133 / 107	V4.F107
Phil / Colossians	2:30–4:8 4:8–23 / 1:1–13	799	134 / 108	V4.F108
	1:14–2:8 2:8–3:15 $\text{PB}$ = 102	800	135 / 109	V4.F109
1 Thessalonians	3:15–4:18 1:1–2:13	[8]01	136 / 110	V4.F110
	2:13–4:5 4:5–5:15	802	137 / 111	V4.F111
1 Thess / 2 Thess	5:15–28 / 1:1–12 1:12–3:10	803	138 / 112	V4.F112
2 Thess / Hebrews	3:11–18 / 1:1–13 1:13–3:6	804	139 / 113	V4.F113
	3:7–4:13 4:14–6:10	805	140 / 114	V4.F114
	6:10–7:16 7:16–8:12	806	141 / 115	V4.F115
	8:12–9:23 9:24–10:23	807	-- <sup>26</sup> / 116	V4.F116
	10:23–11:10 11:10–35 [pr] = 103	808	142 / 117	V4.F117
	11:36–12:23 12:23–13:21	809	143 / 118	V4.F118
Hebrews / 1 Tm	13:21–25 / 1:1–15 1:15–3:13	[81]0	144 / 119	V4.F119
	3:14–5:13 5:13–6:14	811	145 / 120	V4.F120
1 Tm / 2 Timothy	6:14–21 / 1:1–12 1:12–2:22	812	146 / 121	V4.F121

<sup>26</sup> Written in very faint pencil by a later hand is: “141+”.

BOOK		QUIRE	ARABIC	YOUNG	ABSOLUTE
	2:22–4:5 4:6–22		[81]3	147 / 122	V4.F122
Titus	1:1–2:12 2:13–3:15		[8]14	148 / 123	V4.F123
Philemon	1–25 --		(815)	149 / 124	V4.F124
Revelation	1:1–2:7 2:8–3:5	[pΔ] = 104	[81]6	150 / 125	V4.F125
	3:5–4:8 4:8–6:7		[81]7	151 / 126	V4.F126
	6:7–7:14 7:14–9:6		818	152 / 127	V4.F127
	9:6–10:8 10:8–11:19		819	153 / [128]	V4.F128
	11:19–13:4 13:4–14:7		820	154 / 129	V4.F129
	14:8–15:8 15:8–17:3		[8]21	155 / 130	V4.F130
	17:3–18:8 18:9–19:7		822	156 / [131]	V4.F131
	19:7–20:6 20:7–21:14		823	157 / 132	V4.F132
	21:14–22:14 22:14–21	pe = 105	(824)	158 / 133	V4.F133
<i>missing leaf</i>					
1 Clement	Prologue – 3:4 3:4–7:2		826	159 / 1	V4.F134
	7:2–10:4 10:4–13:2		827	160 / 2	V4.F135
	13:2–16:8 16:8–18:11		828	161 / 3	V4.F136
	18:11–21:2 21:2–(24.3)		[82]9	162 / 4	V4.F137
	(24.4)–29:1 29:1–33:3		830	163 / 5	V4.F138
	33:3–35:6 35:6–38:2		831	164 / 6	V4.F139
	38:2–42:2 42:2–(45:2)		832	165 / 7	V4.F140
	45:2–48:1 48:1–51:4		833	166 / 8	V4.F141
	51:4–55:6 55:6–57:7		[8]34	167 / [9]	V4.F142
<i>lacuna</i>					
1 Clem / 2 Clem	64:1–65:2 / 1:1–2:2 2:3–6:1		836	168 / 10	V4.F143

BOOK	QUIRE	ARABIC	YOUNG	ABSOLUTE
6:1–9:4 9:4–12:5		(837)	169 / 11	V4.F144

## APPENDIX B

### ORTHOGRAPHIC DATA

The orthographic data from Chapter 4 is presented in complete here, divided by Gospel, by vowel and consonant variation, and displayed in tabular format. In the tables that follow, some of the words with variant spellings in Alexandrinus that *also* appear in normalized form are marked with an asterisk (\*). Additionally, words that have both vowel and consonant variations are marked with (see above/see below) to signify that the word or words occur in both tables. The data presented here represent the comparison of two vocabulary lists generated from my transcription of Alexandrinus and the Byzantine text recorded by Robinson and Pierpont.<sup>1</sup> The electronic methods used to sort and compare the data do not guarantee that these lists are exhaustive, yet they represent a nearly complete (if not complete) list of orthographic differences found in Alexandrinus.<sup>2</sup>

The difficulty of processing orthographic variation in verbs occurred with variants that represented valid spellings of alternate verb forms (particularly for verbs that varied endings between  $\alpha\iota$  and  $\epsilon$ ). The data were sampled to check that verbs which were in particular contexts represented an orthographic difference rather than

---

<sup>1</sup> I am especially grateful to Dr. Maurice Robinson for making his raw text files for the Gospels available to me for this work. The printed edition is: Maurice A. Robinson and William G. Pierpont, *The New Testament in the Original Greek: Byzantine Textform 2005* (Southborough, MA: Chilton, 2005).

<sup>2</sup> The weakness of this process is revealed when both normalized and variant forms of a word occur in Alexandrinus and both represent valid word forms in the normalized vocabulary. The risk of this occurring was reduced by comparing the smaller vocabularies of each Gospel in turn, rather than producing vocabulary lists based on all four Gospels at once.

an actual change of verb form. Whether or not context should be consulted is a methodological consideration that could be debated, as the classification of scribe as copyist and/or editor is more complex and difficult than previously treated by scholars in this field.<sup>3</sup>

## ORTHOGRAPHIC VARIATIONS FOR VOWELS/DIPHTHONGS

### *In Matthew*

Alexandrinus	Normalized	Notes <sup>4</sup>
μαχαιρη	μαχαιρα	α > η in final position
ενεπεξαν	ενεπαιξαν	αι > ε in medial position
λυπεισθε	λυπεισθαι	αι > ε in final position
εξηλθατε	εξηλθετε	ε > α in medial position
ηλθατε	ηλθετε	ε > α in medial position
παρελθατω	παρελθετω	ε > α in medial position
εγειρεσθαι	εγειρεσθε	ε > αι in final position
εδωκαται	εδωκατε	ε > αι in final position
εκρατησεται	εκρατησατε	ε > αι in final position
επεσκεψασθαι	επεσκεψασθε	ε > αι in final position
θελεται *	θελετε	ε > αι in final position
οψεσθαι *	οψεσθε	ε > αι in final position
περιεβαλεται	περιεβαλετε	ε > αι in final position
πορευεσθαι	πορευεσθε	ε > αι in final position
σκανδαλισθησεσθαι	σκανδαλισθησεσθε	ε > αι in final position
συνηγαγεται	συνηγαγετε	ε > αι in final position
γραμματαιων	γραμματεων	ε > αι in medial position
ενεπεζον	ενεπαιζον	ε > αι in medial position
ινι *	ενι	ε > ι in front position
οψη	οψει	ει > η in final position
ιδεν	ειδεν	ει > ι in front position
ιδομεν *	ειδομεν	ει > ι in front position
αχριον	αχρειον	ει > ι in medial position
δινα	δεινα	ει > ι in medial position
πινωντα *	πεινωντα	ει > ι in medial position
ηυλογημενοι	ευλογημενοι	ευ > ηυ in front position

<sup>3</sup> Ulrich Schmid, "Scribes and Variants: Sociology and Typology," in *Textual Variation: Theological and Social Tendencies?*, ed. H. A. G. Houghton and D. C. Parker (Piscataway, NJ: Gorgias, 2008).

<sup>4</sup> Here the notation used by Gignac has been adopted to demonstrate the orthographic differences for words occurring in Alexandrinus. A shift from (normalized) ι to ει in Alexandrinus is represented with an angled bracket: ι > ει.

Alexandrinus	Normalized	Notes <sup>4</sup>
γεθσημανει	γεθσημανη	η > α in final position
ραββει	ραββι	ι > ει in final position
σαβαχθανει	σαβαχθανι	ι > ει in final position
ειδεα	ιδεα	ι > ει in front position
ειματια *	ιματια	ι > ει in front position
αιτεινες	αιτινες	ι > ει in medial position
βλασφημειαν	βλασφημιαν	ι > ει in medial position
γεινεται	γινεται	ι > ει in medial position
ενκατελιπες	εγκατελιπες	ι > ει in medial position
ηλειαν	ηλιαν	ι > ει in medial position
ημειν *	ημιν	ι > ει in medial position
καθεισατε	καθισατε	ι > ει in medial position
κεινουντες	κινουντες	ι > ει in medial position
κουστωδειας	κουστωδιας	ι > ει in medial position (see below)
λαλεια	λαλια	ι > ει in medial position
πειλατος / πειλατω */ πειλατον	πιλατος / πιλατω / πιλατον	ι > ει in medial position
υμειν *	υμιν	ι > ει in medial position
ιηρεμιου	ιερεμιου	ιε > ιη in front position
ετοιμασωμεν	ετοιμασομεν	ο > ω in medial position
ετοιμαι	ετοιμοι	οι > αι in final position
θανατωσουσιν	θανατωσωσιν	ω > ου in medial position

### In Mark

Alexandrinus	Normalized	Notes
ερημiais	ερημιας	α > αι in medial position
εκαθερισθη	εκαθαρισθη	α > ε in medial position
ηνεγκασεν	ηναγκασεν	α > ε in medial position
τεσσαρακοντα	τεσσαρακοντα	α > ε in medial position
καυθεδει	καθευδει	α, ευ > αυ, ε in medial position
εγειρε	εγειραι	αι > ε in final position
εγειρητε	εγειρηται	αι > ε in final position
κατακεισθε	κατακεισθαι	αι > ε in final position
λυπεισθε	λυπεισθαι	αι > ε in final position
προσκαλειτε	προσκαλειται	αι > ε in final position
συνερχετε	συνερχεται	αι > ε in final position
τεθειτε	τιθεται	αι > ε in final position ε > ει in medial position
ενεπεξαν	ενεπαιξαν	αι > ε in medial position
θερμενομενον	θερμαινομενον	αι > ε in medial position
ξηρηνεται	ξηραινεται	αι > ε in medial position
εισελθατω	εισελθετω	ε > α in medial position
εξηλθατε	εξηλθετε	ε > α in medial position

Alexandrinus	Normalized	Notes
ναζαρατ	ναζαρετ	ε > α in medial position
ακουεται	ακουετε	ε > αι in final position
ανεγνωται *	ανεγνωτε	ε > αι in final position
αποκριθηται	αποκριθητε	ε > αι in final position
αποκτενοντες	αποκτενοντες	ε > αι in final position
αρτυσεται	αρτυσετε	ε > αι in final position
αφεται / αφιεται	αφετε / αφιετε	ε > αι in final position
βαπτισθησθαι	βαπτισθησεθε	ε > αι in final position
βλεπεται	βλεπετε	ε > αι in final position
γεινωσκειται / γεινωσκετε	γεινωσκετε	ε > αι in final position
γνωσθαι	γνωσεσθε	ε > αι in final position
δαρησθαι	δαρησεσθε	ε > αι in final position
διελογιζεσθαι	διελογιζεσθε	ε > αι in final position
ειρηνευεται	ειρηνευετε	ε > αι in final position
εκρατησεται	εκρατησατε	ε > αι in final position
ενδυσησθαι	ενδυσησθε	ε > αι in final position
εσεσθαι	εσεσθε	ε > αι in final position
ευρησεται	ευρησετε	ε > αι in final position
θελεται *	θελετε	ε > αι in final position
θροεισθαι	θροεισθε	ε > αι in final position
ιδηται *	ιδητε	ε > αι in final position
κλαιεται	κλαιετε	ε > αι in final position
κωλυεται *	κωλυετε	ε > αι in final position
λαβεται	λαβετε	ε > αι in final position
λαλησηται	λαλησητε	ε > αι in final position
λαμβανεται	λαμβανετε	ε > αι in final position
λεγεται *	λεγετε	ε > αι in final position
μαι *	με	ε > αι in final position
μενεται	μενετε	ε > αι in final position
μετριται	μετρειτε	ε > αι in final position ει > ι in medial position
μνημονευεται	μνημονευετε	ε > αι in final position
νοειται	νοειτε	ε > αι in final position
οιδαται *	οιδατε	ε > αι in final position
οψεσθαι	οψεσθε	ε > αι in final position
παρενεγκαι	παρενεγκε	ε > αι in final position
παρεχεται	παρεχετε	ε > αι in final position
πειραζεται	πειραζετε	ε > αι in final position
πιεσθαι	πιεσθε	ε > αι in final position
πιστευεται	πιστευετε	ε > αι in final position
πλανασθαι	πλανασθε	ε > αι in final position
προμεριμναι	προμεριμνατε	ε > αι in final position
προσευχεσθαι	προσευχεσθε	ε > αι in final position
σκανδαλισθησθαι	σκανδαλισθησεθε	ε > αι in final position



Alexandrinus	Normalized	Notes
σταθῆσθαι	σταθῆσεθε	ε > αι in final position
στηκεται	στηκητε	ε > αι in final position η > ε in medial position
συνιεται	συνιετε	ε > αι in final position
φερεται	φερετε	ε > αι in final position
υπαγεται *	υπαγετε	ε > αι in final position
αφαιθησεται	αφεθησεται	ε > αι in medial position
γραμματαιων	γραμματεων	ε > αι in medial position
παιδαις / παιδας	πεδαις / πεδας	ε > αι in medial position
εγεινετο *	εγενετο	ε > ει in medial position
βοανηργες	βοανεργες	ε > η in medial position
προσεπιπτον	προσεπιπτεν	ε > ο in medial position
ιδεν *	ειδεν	ει > ι in front position
ιδομεν * / ιδον * / ιδοτες / ιδως *	ειδομεν / ειδον / ειδοτες / ειδως	ει > ι in front position
ιμι *	ειμι	ει > ι in front position
αλιψωσιν	αλειψωσιν	ει > ι in medial position
ανεσισαν	ανεσεισαν	ει > ι in medial position
ασελγια	ασελγεια	ει > ι in medial position
διξει	δειξει	ει > ι in medial position
διπνον	δειπνον	ει > ι in medial position
εδιραν	εδειραν	ει > ι in medial position
επινασεν	επεινασεν	ει > ι in medial position
ηλιφον	ηλειφον	ει > ι in medial position
καισαριας	καισαρειας	ει > ι in medial position
καταλιψει	καταλειψει	ει > ι in medial position
οφισ	οφεις	ει > ι in medial position
πλιον *	πλειον	ει > ι in medial position
πορνιαι	πορνειαι	ει > ι in medial position
σισμοι	σεισμοι	ει > ι in medial position
σκυλλις	σκυλλεις	ει > ι in medial position
σπειριν	σπειρειν	ει > ι in medial position
χριαν	χρειαν	ει > ι in medial position
υστερεσεως	υστερησεως	η > ε in medial position
γεθσημανει	γεθσημανη	η > ει in final position
εξαναστησει	εξαναστηση	η > ει in final position
μωσει	μωση	η > ει in medial position
αλεις	αλιεις	ι > ε in medial position
κουμει	κουμι	ι > ει in final position
νυκτει	νυκτι	ι > ει in final position
ραββει *	ραββι	ι > ει in final position
σιβακθανει	σαβακθανι	ι > ει in final position (see below)
απιστεια	απιστια	ι > ει in medial position
απιστειαν	απιστιαν	ι > ει in medial position

Alexandrinus	Normalized	Notes
ατειμος	ατιμος	ι > ει in medial position
βλασφημεια / βλασφημειαι / βλασφημειας / βλασφημειαν	βλασφημια / βλασφημιαι / βλασφημιας / βλασφημιαν	ι > ει in medial position
γινεται / γεινονται / γεινομενα	γινεται / γινονται / γινομενα	ι > ει in medial position
διδασκαλειας	διδασκαλιας	ι > ει in medial position
ειδυεια	ειδυια	ι > ει in medial position
εκαθεισεν	εκαθισεν	ι > ει in medial position
εκτειναξατε	εκτιναξατε	ι > ει in medial position
εκτεισεν	εκτισεν	ι > ει in medial position
ενκατελειπες	εγκατελιπες	ι > ει in medial position (see below)
επεγεινωσκεν	επεγινωσκεν	ι > ει in medial position
επετειμα	επετιμα	ι > ει in medial position
επετειμησεν	επετιμησεν	ι > ει in medial position
ηγγεικεν	ηγγικεν	ι > ει in medial position
ηλειαν * / ηλειας *	ηλιαν / ηλιας	ι > ει in medial position
ημειν *	ημιν	ι > ει in medial position
θλιψεις	θλιψις	ι > ει in medial position
ιεροσολυμειται	ιεροσολυμται	ι > ει in medial position
καθεισας	καθισας	ι > ει in medial position
κανανειτην	κανανιτην	ι > ει in medial position
καταλειπη	καταλιπη	ι > ει in medial position
κεινουντες	κινουντες	ι > ει in medial position
κλεινην / κλεινης	κλινην / κλινης	ι > ει in medial position
μεικροτερος	μικροτερος	ι > ει in medial position
μεικρον * / μεικρου	μικρον / μικρου	ι > ει in medial position
μεισουμενοι	μισουμενοι	ι > ει in medial position
οιτεινες *	οιτινες	ι > ει in medial position
οψειας *	οψιας	ι > ει in medial position
παραγεινεται	παραγινεται	ι > ει in medial position
πειλατον / πειλατος / πειλατω	πιλατον / πιλατος / πιλατω	ι > ει in medial position
πεινακι *	πινακι	ι > ει in medial position
πεινω *	πινω	ι > ει in medial position
πεντακισχιλιοι / πεντακισχιλιους	πεντακισχιλιοι / πεντακισχιλιους	ι > ει in medial position
πεφειμωσο	πεφιμωσο	ι > ει in medial position
πολλακεις	πολλακις	ι > ει in medial position
πολυτειμου	πολυτιμου	ι > ει in medial position
πρασειαι	πρασιαι	ι > ει in medial position
σκειαν	σκιαν	ι > ει in medial position

Alexandrinus	Normalized	Notes
συνπνιγουσιν	συνπνιγουσιν	ι > ει in medial position (see below)
τειμα *	τιμα	ι > ει in medial position
τεινας */ τεινες *	τινας / τινες	ι > ει in medial position
τετρακισχειλιοι	τετρακισχιλιοι	ι > ει in medial position
τρακισχειλιους	τετρακισχιλιους	ι > ει in medial position
υμειν	υμιν	ι > ει in medial position
υπερηφανεια	υπερηφανια	ι > ει in medial position
χειλιαρχοις	χιλιαρχοις	ι > ει in medial position
χωρεις	χωρις	ι > ει in medial position
τεινας	τινας	ι > ει in medial position
δισχειλιοι	δισχιλιοι	ι > ει in medial position (bis)
πρωτοκλησιας	πρωτοκλισιας	ι > η in medial position
εξεδετο	εξεδοτο	ο > ε in medial position
απεκατεσταθη	αποκατεσταθη	ο > ε in prepositional prefix
καθαριζων	καθαριζον	ο > ω in medial position
κηρυναιον	κυρηναιον	υ, η > η, υ in medial position
απαρνησομαι	απαρνησωμαι	ω > ο in medial position
μειζον *	μειζων	ω > ο in medial position
σταυρωσουσιν	σταυρωσωσιν	ω > ου in medial position

#### In Luke

Alexandrinus	Normalized	Notes
καικεινα	κακεινα	α > αι in medial position (uncontracted)
εκαθερισθη / εκαθερισθησαν	εκαθαρισθη / εκαθαρισθησαν	α > ε in medial position
κτησεσθαι	κτησασθε	α > ε in medial position ε > αι in final position
μελελεηλ	μαλελεηλ	α > ε in medial position
ποιησειεν	ποιησειαν	α > ε in medial position
τεσσαρακοντα	τεσσαρακοντα	α > ε in medial position
δεξε	δεξαι	αι > ε in final position
δεξητε	δεξηται	αι > ε in final position
δεχετε	δεχεται	αι > ε in final position
διαμαρτυρητε	διαμαρτυρηται	αι > ε in final position
διαφυλαξε	διαφυλαξαι	αι > ε in final position
εγειρε	εγειραι	αι > ε in final position
εντελειτε	εντελειται	αι > ε in final position
ευεργετε	ευεργεται	αι > ε in final position
μνησθηνε	μνησθηναι	αι > ε in final position
πεσειτε	πεσειται	αι > ε in final position
περιζωσετε	περιζωσεται	αι > ε in final position
περικειτε	περικειται	αι > ε in final position

Alexandrinus	Normalized	Notes
ποιησε	ποιησαι	αι > ε in final position
πωλειτε	πωλειται	αι > ε in final position
σινιασε	σινιασαι	αι > ε in final position
υστερεισθε	υστερεισθαι	αι > ε in final position
φαγεσε	φαγεσαι	αι > ε in final position
ωφελειτε	ωφελειται	αι > ε in final position
εφνιδιος	αιφνιδιος	αι > ε in front position
αφερειτε	αφαιρειται	αι > ε in medial position αι > ε in final position
ελεον	ελαιον	αι > ε in medial position
ενεπεζον	ενεπαιζον	αι > ε in medial position
ενπεχθησεται	εμπαιχθησεται	αι > ε in medial position (see below)
εξεφνης	εξαιφνης	αι > ε in medial position
ευκεριαν	ευκαιριαν	αι > ε in medial position
κερεαν	κεραιαν	αι > ε in medial position
κρεπαλη	κραιπαλη	αι > ε in medial position
προφητες	προφηταις	αι > ε in medial position
ναζαραθ	ναζαρεθ	ε > α in medial position
αγωνιζεσθαι	αγωνιζεσθε	ε > αι in final position
ακολουθησεται	ακολουθησατε	ε > αι in final position
ακουσεται	ακουσατε	ε > αι in final position
αναπεσαι	αναπεσε	ε > αι in final position
αποδεκατουται	αποδεκατουτε	ε > αι in final position
απολυθησεται	απολυθησεσθε	ε > αι in final position
αρξησθαι	αρξησθε	ε > αι in final position
γελασεται	γελασετε	ε > αι in final position
διαμερισεται	διαμερισατε	ε > αι in final position
διωξεται	διωξητε	ε > αι in final position
δοκειται	δοκειτε	ε > αι in final position
δυνασθαι	δυνασθε	ε > αι in final position
εγενεσθαι	εγενεσθε	ε > αι in final position
εισερχησθαι	εισερχησθε	ε > αι in final position
ενδυσησθαι	ενδυσησθε	ε > αι in final position
επιθυμησεται	επιθυμησετε	ε > αι in final position
εσεσθαι	εσεσθε	ε > αι in final position
ευρησεται	ευρησετε	ε > αι in final position
θεσθαι	θεσθε	ε > αι in final position
θεωρειται	θεωρειτε	ε > αι in final position
ιατραι	ιατρε	ε > αι in final position
καταξιωθηται	καταξιωθητε	ε > αι in final position
λεγεται	λεγετε	ε > αι in final position
λυεται	λυετε	ε > αι in final position
μεριμναται	μεριμνατε	ε > αι in final position
μετεωριζεσθαι	μετεωριζεσθε	ε > αι in final position

Alexandrinus	Normalized	Notes
μνημονευεται	μνημονευετε	ε > αι in final position
οικοδομειται	οικοδομειτε	ε > αι in final position
οψεσθαι	οψεσθε	ε > αι in final position
παραδοθησεσθαι	παραδοθησεσθε	ε > αι in final position
παρερχεσθαι	παρερχεσθε	ε > αι in final position
ποιειται / ποιησεται	ποιειτε / ποιησατε	ε > αι in final position
πραγματευσασθαι	πραγματευσασθε	ε > αι in final position
προσψανεται	προσψανετε	ε > αι in final position
φοβεισθαι	φοβεισθε	ε > αι in final position
χορτασθησεσθαι	χορτασθησεσθε	ε > αι in final position
αινωσ	ενωσ	ε > αι in front position
αινωχ	ενωχ	ε > αι in front position
αναιλωσιν	ανελωσιν	ε > αι in medial position
γραμματαιων	γραμματεων	ε > αι in medial position
ενναια	εννεα	ε > αι in medial position
εταιραι	ετεραι	ε > αι in medial position
καιχαριτωμενη	κεχαριτωμενη	ε > αι in medial position
καταιβενεν	κατεβαινεν	ε > αι in medial position αι > ε in medial position (see below)
ναζαρατ	ναζαρετ	ε > αι in medial position
ποιμινες	ποιμενες	ε > αι in medial position
φωλαιους	φωλεους	ε > αι in medial position
εδειτο	εδεετο	ε > ει in medial position
διατιθημι	διατιθεμαι	ε > η in medial position αι > ι in final position
εστι	εστε	ε > ι in final position
επισκεψατο	επεσκεψατο	ε > ι in medial position
αφιομεν	αφιεμεν	ε > ο in medial position
ναιμαν	νεεμαν	εε > αι in medial position
παρηγγειλεν	παρηγγειλεν	ει > ε in medial position (see below)
σεμει	σεμει	ει > εει in final position
διδαξη	διδαξει	ει > η in final position
παρεξη	παρεξει	ει > η in final position
ηθισμενον	ειθισμενον	ει > η in front position
προσηργασατο	προσειργασατο	ει > η in medial position
διαφθειρι	διαφθειρει	ει > ι in final position
ειδι	ειδει	ει > ι in final position
ιδατε / ιδεν / ιδομεν / ιδον	ειδετε / ειδεν / ειδομεν / ειδον	ει > ι in front position
ιστηκει / ιστηκεισαν	ειστηκει / ειστηκεισαν	ει > ι in front position
ιωθος	ειωθος	ει > ι in front position
αναδιξεως	αναδειξεως	ει > ι in medial position
ανασει	ανασειει	ει > ι in medial position

Alexandrinus	Normalized	Notes
αντιπειν	αντειπειν	ει > ι in medial position
απιθεις	απειθεις	ει > ι in medial position
αποθανιν	αποθανειν	ει > ι in medial position
ασθενιων	ασθενειων	ει > ι in medial position
αχροι	αχρειοι	ει > ι in medial position
γιτονας	γειτονας	ει > ι in medial position
διξατε	δειξατε	ει > ι in medial position
διπνησαι / διπνησω	δειπνησαι / δειπνησω	ει > ι in medial position
διπνοις / διπνον / διπνου	δειπνοις / δειπνον / δειπνου	ει > ι in medial position
εκπιρασεις	εκπειρασεις	ει > ι in medial position
επινασεν	επεινασεν	ει > ι in medial position
ηλιψας	ηλειψας	ει > ι in medial position
καταλιπει	καταλειπει	ει > ι in medial position
κλιδα	κλειδα	ει > ι in medial position
λιπει	λειπει	ει > ι in medial position
μετριται	μετρειτε	ει > ι in medial position ε > αι in final position
νηστιας	νηστειαις	ει > ι in medial position
ονιδος	ονειδος	ει > ι in medial position
ορινη / ορινην	ορεινη / ορεινην	ει > ι in medial position
οφιλεις / οφιλεται	οφειλεις / οφειλεται	ει > ι in medial position
παραιτισθε	παραιτεισθαι	ει > ι in medial position αι > ε in final position
πινασετε	πεινασετε	ει > ι in medial position
πιωνντας	πειωνντας	ει > ι in medial position
πιρασμου	πειρασμου	ει > ι in medial position
πλατιας	πλατειαις	ει > ι in medial position
πλιον	πλειον	ει > ι in medial position
πλιωνων	πλειωνων	ει > ι in medial position
ποριαν	πορειαν	ει > ι in medial position
σαμαριας / σαμαριτων	σαμαρειας / σαμαρειτων	ει > ι in medial position
σημιον	σημειον	ει > ι in medial position
σκοτινον	σκοτεινον	ει > ι in medial position
σπειριν	σπειρειν	ει > ι in medial position
ταπινωσιν / ταπινωθησεται / ταπινων	ταπεινωσιν / ταπεινωθησεται / ταπεινων	ει > ι in medial position
τελιουμαι	τελειουμαι	ει > ι in medial position
τελιωσις	τελειωσις	ει > ι in medial position
φωτινον	φωτεινον	ει > ι in medial position
χριαν	χρειαν	ει > ι in medial position
ηυδοκησα	ευδοκησα	ευ > ηυ in front position
ηυρεθη	ευρεθη	ευ > ηυ in front position
ηυφορησεν	ευφορησεν	ευ > ηυ in front position

Alexandrinus	Normalized	Notes
απαλλαχθαι	απηλλαχθαι	η > α in medial position
φωνησει	φωνηση	η > αι in final position
αναθεμασιν	αναθημασιν	η > ε in medial position
βουλετε	βουληται	η > ε in medial position αι > ε in final position
διερμηνευεν	διηρμηνευεν	η > ε in medial position
επερεαζοντων	επηρεαζοντων	η > ε in medial position
εξαναστησει	εξαναστηση	η > ει in final position
επιταξει	επιταξη	η > ει in final position
ιωαννει	ιωαννη	η > ει in final position
μωσει	μωση	η > ει in final position
ειδι	ηδει	η > ει in front position ει > ι in final position
ειμηθανη	ημιθανη	η > ει in front position ι > η in medial position
αναπειρους	αναπηρους	η > ει in medial position
εμαξεν	εμιξεν	ι > α in medial position
αλειεις	αλιεις	ι > ε in medial position
αδδει	αδδι	ι > ει in final position
εσλει	εσλι	ι > ει in final position
ηλει	ηλι	ι > ει in final position
ισθει	ισθι	ι > ει in final position
μελχει	μελχι	ι > ει in final position
νηρει	νηρι	ι > ει in final position
ειδειν	ιδειν	ι > ει in front position
ειδου	ιδου	ι > ει in front position
ειματισμενον	ιματισμενον	ι > ει in front position
ειματισμος	ιματισμος	ι > ει in front position
αβειληνης	αβιληνης	ι > ει in medial position
αγαλλιασεις	αγαλλιασις	ι > ει in medial position
αδικειας	αδικιας	ι > ει in medial position
αιτεινες	αιτινες	ι > ει in medial position
αληθινον	αληθινον	ι > ει in medial position
ανακλειθησονται	ανακλιθησονται	ι > ει in medial position
ανακρεινας	ανακρινας	ι > ει in medial position
ανεκαθισεν	ανεκαθισεν	ι > ει in medial position
ανεκλειναν	ανεκλιναν	ι > ει in medial position
ανεκλεινεν	ανεκλινεν	ι > ει in medial position
απεκεφαλαισα	απεκεφαλισα	ι > ει in medial position
αποθλειβουσιν	αποθλιβουσιν	ι > ει in medial position
γεινεσθαι / γεινεσθω / γεινεται / γεινομενα / γεινομενοις / γεινομενον / γεινου	γινεσθαι / γινεσθω / γινεται / γινομενα / γινομενοις / γινομενον / γινου	ι > ει in medial position

Alexandrinus	Normalized	Notes
γεινωσκετε	γινωσκεται	ι > ει in medial position αι > ε in final position
δαυειδ	δαυιδ	ι > ει in medial position
διελειπεν	διελιπεν	ι > ει in medial position
εγεινωσκεν	εγινωσκεν	ι > ει in medial position
εδειδου	εδιδου	ι > ει in medial position
εκαθεισεν	εκαθισεν	ι > ει in medial position
εκαμειζονται	εκαμιζονται	ι > ει in medial position
εκστασεις	εκστασις	ι > ει in medial position
εμεισουν	εμισουν	ι > ει in medial position
επαγγελιαν	επαγγελιαν	ι > ει in medial position
επεισιτισμον	επισιτισμον	ι > ει in medial position
επειτιμησον	επιτιμησον	ι > ει in medial position
επεκρινεν	επεκρινεν	ι > ει in medial position
επεσκιασεν	επεσκιασεν	ι > ει in medial position
επετειμα / επετειμησαν / επετειμησεν	επετιμα / επετιμησαν / επετιμησεν	ι > ει in medial position
επετειμουν	επετιμων	ι > ει in medial position
επιτειμησας	επιτιμησας	ι > ει in medial position
ερημωσεις	ερημωσις	ι > ει in medial position
εσειγησαν	εσιγησαν	ι > ει in medial position
εχρεισεν	εχρισεν	ι > ει in medial position
ηγγειζεν / ηγγικεν / ηγγεισαν / ηγγεισεν	ηγγιζεν / ηγγικεν / ηγγισαν / ηγγισεν	ι > ει in medial position
ηγεμονειας	ηγεμονιας	ι > ει in medial position
ημειν	ημιν	ι > ει in medial position
καθειςας / καθισατε	καθισας / καθισατε	ι > ει in medial position
καταλειπων	καταλιπων	ι > ει in medial position
κατελειπον	κατελιπον	ι > ει in medial position
κλειβανον	κλιβανον	ι > ει in medial position
κλεινης * / κλεινη	κλινης / κλινη	ι > ει in medial position
κλεινιδιω	κλινιδιω	ι > ει in medial position
κλεινουσων	κλινουσων	ι > ει in medial position
κλινειδιον	κλινιδιον	ι > ει in medial position
κρινετε	κρινετε	ι > ει in medial position
λειαν	λιαν	ι > ει in medial position
λειμοι / λειμος / λειμω	λιμοι / λιμος / λιμω	ι > ει in medial position
μεισησωσιν / μεισουμενοι / μεισουντων / μεισουσιν	μισησωσιν / μισουμενοι / μισουντων / μισουσιν	ι > ει in medial position
οικτειρμονες / οικτειρμων	οικτιρμονες / οικτιρμων	ι > ει in medial position
οιτινες	οιτινες	ι > ει in medial position
παρθενειας	παρθενιας	ι > ει in medial position



Alexandrinus	Normalized	Notes
πεδεινου	πεδινου	ι > ει in medial position
πεινων	πινων	ι > ει in medial position
πεντακισχειλιοι	πεντακισχιλιοι	ι > ει in medial position
ρυσεις	ρυσις	ι > ει in medial position
σειδωνι / σειδωνος	σιδωνι / σιδωνος	ι > ει in medial position
σειτου	σιτου	ι > ει in medial position
ταμιοις	ταμειοις	ι > ει in medial position
τεινες	τινες	ι > ει in medial position
τραχωνιτειδος	τραχωνιτιδος	ι > ει in medial position
υμειν	υμιν	ι > ει in medial position
χοραζειν	χοραζιν	ι > ει in medial position
ηλεια / ηλειου	ηλια / ηλιου	ι > ει in medial position
λευεις / λευειν / λευει	λευις / λευιν / λευι	ι > ει in medial position
πειλατον / πειλατος / πειλατου / πειλατω	πιλατον / πιλατος / πιλατου / πιλατω	ι > ει in medial position
ηματιοις	ιματιοις	ι > η in front position
θρηξιν	θριξιν	ι > η in medial position
καθησεσθαι	καθισεσθε	ι > η in medial position ε > αι in final position
κλησιας	κλισιας	ι > η in medial position
πρωτοκλησιαν / πρωτοκλησιας	πρωτοκλισιαν / πρωτοκλισιας	ι > η in medial position
φιλονικεια	φιλονεικια	ι, ει > ει, ι in medial position
ελαβαμεν	ελαβομεν	ο > α in medial position
εξεδετο	εξεδοτο	ο > ε in medial position
σιδωνιας	σιδωνος	ο > ια in medial position
ετυπτουν	ετυπτον	ο > ου in medial position
αφρων	αφρον	ο > ω in medial position
βαθεως	βαθεος	ο > ω in medial position
ετοιμασωμεν	ετοιμασομεν	ο > ω in medial position
οσων	οσον	ο > ω in medial position
παρεδωσαν	παρεδοσαν	ο > ω in medial position
υπωπιαζη	υποπιαζη	ο > ω in medial position
συκωμοραιαν	συκομωραιαν <sup>5</sup>	ο, ω > ω, ο in medial position
κηρυνιου	κυρηνιου	υ, η > η, υ in medial position
ανορθωθη	ανωρθωθη	ω > ο in medial position
χρεοφιλεται / χρεοφιλετων	χρεωφειλεται / χρεωφειλετων	ω > ο in medial position ει > ι in medial position
κατηγορησουσιν	κατηγορησωσιν	ω > ου in medial position
σιωπησουσιν	σιωπησωσιν	ω > ου in medial position

<sup>5</sup> An alternative would be συκομορεαν.

*In John*

Alexandrinus	Normalized	Notes
οιω	ω	(correction)
θυγατηρ	θυγατερ	Nominative instead of vocative
προβατια	προβατα	α > ια in final position
εκραυγασον	εκραυγασαν	α > ο in medial position
απολητε *	αποληται	αι > ε in final position
εγειρετε *	εγειρεται	αι > ε in final position
ερχετε *	ερχεται	αι > ε in final position
κρινετε	κρινεται	αι > ε in final position
λιθινε	λιθιναι	αι > ε in final position
πορευετε	πορευεται	αι > ε in final position
σταυρωσε	σταυρωσαι	αι > ε in final position
χαμε	χαμαι	αι > ε in final position
θερμενομενος	θερμαινομενος	αι > ε in medial position
κεεται	καιεται	αι > ε in medial position
συναγωγοι	συναγωγαι	αι > οι in final position
ακηκοатаι	ακηκοατε	ε > αι in final position
ακουεται	ακουετε	ε > αι in final position
βουλεσθαι	βουλεσθε	ε > αι in final position
γενησεσθαι	γενησεσθε	ε > αι in final position
γνωσεσθαι	γνωσεσθε	ε > αι in final position
γογγυζεται	γογγυζετε	ε > αι in final position
δυνασθαι	δυνασθε	ε > αι in final position
εξεται	εχετε	ε > αι in final position (see below)
επαρатаι	επαρατε	ε > αι in final position
εχεται *	εχετε	ε > αι in final position
ζησεσθαι	ζησεσθε	ε > αι in final position
ζητησεται	ζητησετε	ε > αι in final position
ητησασθαι	ητησασθε	ε > αι in final position
θαυμαζεται	θαυμαζητε	ε > αι in final position
θεασασθαι	θεασασθε	ε > αι in final position
θεωρεται * / θεωριται	θεωρειτε	ε > αι in final position
θρηνησεται	θρηνησετε	ε > αι in final position
λαμβάνεται *	λαμβάνετε	ε > αι in final position
λιθαζεται	λιθαζετε	ε > αι in final position
λυπηθησεσθαι	λυπηθησεσθε	ε > αι in final position
μαινειν	μενειν	ε > αι in final position
μνημονευηται	μνημονευητε	ε > αι in final position
οψεσθαι	οψεσθε	ε > αι in final position
πιστευσηται	πιστευσητε	ε > αι in final position
προσκυνησεται	προσκυνησετε	ε > αι in final position
φερηται *	φερητε	ε > αι in final position
συνετεθεντο	συνετεθειντο	ει > ε in medial position
οψη	οψει	ει > η in final position

Alexandrinus	Normalized	Notes
κηριαις	κειριαις	ει > η in medial position
ιδεν * / ιδον *	ειδεν / ειδον	ει > ι in front position
ιδος	ειδος	ει > ι in front position
ιδως *	ειδως	ει > ι in front position
ιστηκει / ιστηκεισαν	ειστηκει / ειστηκεισαν	ει > ι in front position
αλιψασα	αλειψασα	ει > ι in medial position
ασθενια *	ασθενεια	ει > ι in medial position
γιτονες	γειτονες	ει > ι in medial position
διγνυεις / διγνυσιν	δεικνυεις / δεικνυσιν	ει > ι in medial position (see below)
διλιατω	δειλιατω	ει > ι in medial position
διξει	δειξει	ει > ι in medial position
διπνον / διπνου	δειπνον / δειπνου	ει > ι in medial position
εγρει	εγειρει	ει > ι in medial position
εμινεν *	εμεινεν	ει > ι in medial position
κεκλισμενων	κεκλεισμενων	ει > ι in medial position
μινατε *	μεινατε	ει > ι in medial position
οφιλει / οφιλετε	οφειλει / οφειλετε	ει > ι in medial position
πλιους	πλειους	ει > ι in medial position
σαμαριται	σαμαρειται	ει > ι in medial position
ταχειον	ταχιον	ει > ι in medial position
τεθικατε	τεθεικατε	ει > ι in medial position
τελιωσω *	τελειωσω	ει > ι in medial position
χριαν	χρειαν	ει > ι in medial position
πιστευεται	πιστευητε	η > ε in medial position ε > αι in final position
σαλλειμ	σαλημ	η > ε in medial position (see below)
μωσει	μωση	η > ει in final position
ειδεις	ηδεις	η > ει in front position
απολλυηται *	αποληται	η > υη in medial position (see below)
ραββει *	ραββι	ι > ει in final position
ειδη	ιδη	ι > ει in front position
ειματιον	ιματιον	ι > ει in front position
αληθεινη / αληθεινοι / αληθεινον * / αληθινος	αληθινη / αληθινοι / αληθινον / αληθινος	ι > ει in medial position
αρνεια	αρνια	ι > ει in medial position
αρχιτρικλινος *	αρχιτρικλινος	ι > ει in medial position
βασιλεικος *	βασιλικος	ι > ει in medial position
βλασφημιας	βλασφημιας	ι > ει in medial position
γεινομενης / γεινομενον	γinoμενης / γinoμενον	ι > ει in medial position
γεινωσκει / γεινωσκετε * / γεινωσκουσιν / γεινωσχω *	γινωσκει / γινωσκετε / γινωσκουσιν / γινωσχω	ι > ει in medial position

Alexandrinus	Normalized	Notes
εγεινετο	εγινετο	ι > ει in medial position
εκαθεισεν	εκαθισεν	ι > ει in medial position
εμεισησεν	εμισησεν	ι > ει in medial position
επεχρεισεν	επεχρισεν	ι > ει in medial position
ζητησεις	ζητησις	ι > ει in medial position
κλεινας	κλινας	ι > ει in medial position
νικοδημος *	νικοδημος	ι > ει in medial position
οδοιπορειας	οδοιποριας	ι > ει in medial position
παρεγεινοντο	παρεγινοντο	ι > ει in medial position
πειλατον / πειλατος / πειλατω	πιλατον / πιλατος / πιλατω	ι > ει in medial position
πεντακισχειλιοι	πεντακισχιλιοι	ι > ει in medial position
πολλακεις	πολλακις	ι > ει in medial position
σειων	σιων	ι > ει in medial position
χωρεις	χωρις	ι > ει in medial position
θρηξιν	θριξιν	ι > η in medial position
ακηκοατας	ακηκοοτας	ο > α in medial position
αγορασωμεν	αγορασομεν	ο > ω in medial position
δικαιωσυνης *	δικαιοσυνης	ο > ω in medial position
ερχωμαι *	ερχομαι	ο > ω in medial position
ακουσωσιν	ακουσουσιν	ου > ω in medial position
εθεωρων	εθεωρουν	ου > ω in medial position
ελουετο	ελυετο <sup>6</sup>	υ > ου in medial position (corrected text?)
πηχεων	πηχων	ω > εω in medial position
ιασμαι	ιασωμαι	ω > ο in medial position
μειζον	μειζων	ω > ο in medial position
ακολουθησουσιν	ακολουθησωσιν	ω > ου in medial position
εμβριμουμενος	εμβριμωμενος	ω > ου in medial position

## ORTHOGRAPHIC VARIATIONS FOR CONSONANTS/OTHER

### *In Matthew*

Alexandrinus	Normalized	Notes
ενκατελειπες	εγκατελειπες	γκ > νκ in medial position (see above)
εκχυννομενον	εκχυνομενον	ν > νν in medial position
εγενηθη	εγεννηθη	νν > ν in medial position
κωστουδιας	κουστωδιας	ου, ω > ω, ου transposition (see above)
συνσταυρωθεντες	συσταυρωθεντες	συσ > συν in front position

<sup>6</sup> Because this line of text appears to be in the midst of a correction (unsurprising, given the textual variants that occur at John 5:4), the orthographic difference here is not included in the calculations found in Chapter 4.

**In Mark**

Alexandrinus	Normalized	Notes
εμμεσω	εν μεσω	Assimilation of ν
βαπτισμου	βαπτισμους	Omitted final σ
κραβαττοις/κραβαττον	κραββατοις/κραββατον	ββ > β in medial position τ > ττ in medial position
μογιλαλον	μογγιλαλον	γγ > γ in medial position
ενκατελειπες	εγκατελειπες	γκ > νκ in medial position (see above)
συνκαθημενος	συγκαθημενος	γκ > νκ in medial position
συνκαλουσιν	συγκαλουσιν	γκ > νκ in medial position
συνζητειν / συνζητειτε / συνζητουντας / συνζητουντες / συνζητουντων	συζητειν / συζητειτε / συζητουντας / συζητουντες / συζητουντων	ζ > νζ in medial position
βηδσαιδαν *	βηθσαιδαν	θ > δ in medial position
ρακκους	ρακους	κ > κκ in medial position
παρηγγειλλεν	παρηγγειλεν	λ > λλ in medial position
συνπνιγουσιν	συμπνιγουσιν	μ > ν in medial position
συνπορευονται	συμπορευονται	μ > ν in medial position
συνποσια	συμποσια	μ > ν in medial position
εκχυννομενον	εκχυνομενον	ν > νν in medial position
επιραπτει	επιρραπτει	ρρ > ρ in medial position
προτρεχοντες	προστρεχοντες	στρ > τρ in medial position
συστασιαστων	συστασιαστων	σσ > συνσ; insertion of nasal in medial position
βηθφαγη	βηθσφαγη	σφ > φ in medial position
ανελημφθη	ανεληφθη	φ > μφ in medial position
σιβακθανει	σαβακθανι	χ > κ in medial position (see above)
λημψονται	ληψονται	ψ > μψ in medial position
φευδοχριστοι	ψευδοχριστοι	ψ > φ in front position

**In Luke**

Alexandrinus	Normalized	Notes
συμ	συν	Assimilation of ν
ανοιχθησεται	ανοιγησεται	Confusion of sounds <sup>7</sup>
ματταθ	μαθθατ οι μαθθατ	Interchange of aspirated/voiced stop
ιδως	ιδρωσ	Omission of ρ after a stop
ζορομβαβελ	ζοροβαβελ	β > μβ in medial position
ναγαι	ναγγαι	γγ > γ in medial position

<sup>7</sup> While ανοιχθησεται is a valid normalized spelling, it may have resulted from confusion of sounds; while it is omitted from the analysis in Chapter 4, it is listed here for completeness.

Alexandrinus	Normalized	Notes
ενκυω	εγκυω	γκ > νκ in medial position
συνκαθισαντων	συγκαθισαντων	γκ > νκ in medial position
συνκαλειται	συγκαλειται	γκ > νκ in medial position
συνκατατεθειμενος	συγκατατεθειμενος	γκ > νκ in medial position
συνκυριαν	συγκυριαν	γκ > νκ in medial position
φαραξ	φαραγξ	γξ > ξ in final position
συνχαρητε	συγχαρητε	γχ > νχ in medial position
ιαρεθ	ιαρεδ	δ > θ in final position
συνζητειν	συζητειν	ζ > νζ in medial position
βοος	βοοζ	ζ > σ in final position
βηδσαιδα	βηθσαιδα	θ > δ in medial position
βαλλαντια / βαλλαντιον / βαλλαντιου	βαλαντια / βαλαντιον / βαλαντιου	λ > λλ in medial position
επιβαλλων	επιβαλων	λ > λλ in medial position
παρηγγελλεν	παρηγγειλεν	λ > λλ in medial position (see above)
ενπεχθησεται	εμπαιχθησεται	μ > ν in medial position (see above)
πανπληθει	παμπληθει	μ > ν in medial position
συνπαραγενομενοι	συμπαραγενομενοι	μπ > νπ in medial position
συνπληρουσθαι	συμπληρουσθαι	μπ > νπ in medial position
συνπνιγονται	συμπνιγονται	μπ > νπ in medial position
συνφυσισαι	συμφυσισαι	μπ > νπ in medial position
εκχυννομενον	εχχυννομενον	ν > νν in medial position
καταιβενεν	κατεβαινεν	ν > νν in medial position (see above)
υπερεκχυννομενον	υπερεχχυννομενον	ν > νν in medial position
παρκτορι	πρακτορι	ρα > αρ in medial position
διαρησων	διαρρησων	ρρ > ρ in medial position
διερρηγνυτο	διερρρηγνυτο	ρρ > ρ in medial position
επιριψαντες	επιρριψαντες	ρρ > ρ in medial position
ελισαιου	ελισσαιου	σσ > σ in medial position
βηθφαγη	βηθσφαγη	σφ > φ in medial position
κεκληκοντι	κεκληχοτι	τ > ντ in final position
εσκορτισθη	εσκοτισθη	τ > ρτ in medial position
παραλημφθησεται	παραληφθησεται	φ > μφ in medial position
συλλημφθηναι	συλληφθηναι	φ > μφ in medial position
δραγμας	δραχμας	χ > γ in medial position
εχθρους	εχθρους	χ > χχ in medial position
δραγχην	δραχμην	χμ > γχ in medial position
ανακυμψαι	ανακυψαι	ψ > μψ in medial position
αναλημψεως	αναληψεως	ψ > μψ in medial position
λημψονται	ληψονται	ψ > μψ in medial position
συλλημψη	συλληψη	ψ > μψ in medial position

*In John*

Alexandrinus	Normalized	Notes
χειραν	χειρα	Added final ν <sup>8</sup>
εκρυγαζον	εκραυγασαν / εκραζον	Confusion of forms?
δηποτ	δηποτε	Elision (before vowel)
ελεγε	ελεγεν	Movable -ν
ελυε	ελυεν	Movable -ν
μαριαμ *	μαριαν / μαρια	Movable -ν > μ in final position
εμψας	εμβαψας	Omitted medial syllable βα
ερωτας	επερωτας	Omitted medial syllable πε
εβριμησατο	ενεβριμησατο	ενε > ε in front position
διγνυεις / διγνυσιν	δεικνυεις / δεικνυσιν	κ > γ in medial position (see above)
διγνυεις / διγνυσιν	δεικνυεις / δεικνυσιν	κ > γ in medial position (see above)
σαλλειμ	σαλημ	λ > λλ in medial position (see above)
συνμαθηταις	συμμαθηταις	μμ > νμ in medial position
αποκτενοντων / αποκτενουσα	αποκτενοντων / αποκτενουσα	ν > νν in medial position
γεγεννημενου	γεγεννημενου	νν > ν in medial position
γεννηση	γεννηση	νν > ν in medial position
κραβαττον	κραββατον	νν > ν in medial position
εκραζεν	εκραξεν	ξ > ζ in medial position
συσταυρωθεντος	συσταυρωθεντος	συσ > συν in front position
εξεται	εχετε	χ > ξ in medial position (see above)
λημψεσθαι / λημψεσθε / λημψεται	ληψεσθε / ληψεται	ψ > μψ in medial position
παραλημφομαι	παραληφομαι	ψ > μψ in medial position

<sup>8</sup> Horrocks refers to this practice as the “partial merger of the 1st and 3rd declensions” and notes that it began to impact Koine Greek around the 1st century BC, marking “the beginning of the destruction of the distinction between the old consonant-stems and the a-stems of the 1st declension” (Geoffrey Horrocks, *Greek: A History of the Language and its Speakers* [London: Longman, 1997], 69–70).

## APPENDIX C

### STATISTICAL ANALYSIS

The purpose of this appendix is to provide methodological details for the statistical analysis performed in this study so that the work may be reproduced and verified independently. Statistical terminology is briefly explained where feasible; for further explanation of the statistical concepts described below, please see any standard, introductory text.

#### **Primary Objective**

The goal of this statistical analysis is to determine if objective formatting data from Alexandrinus (obtained through measurements of specific paratextual features) support the delineation of scribal hands in the NT as determined by the palaeographical analysis of Chapter 4 (and as first proposed by Kenyon). That delineation is:

- NT Scribe 1 (Kenyon's Scribe 3) copying the Gospels of Matthew and Mark, the *kephalaia* list of Luke, 1 Corinthians 10:8 through Philippians;
- NT Scribe 2 (Kenyon's Scribe 4) copying the Gospel of Luke through 1 Corinthians 10:8;
- NT Scribe 3 (Kenyon's Scribe 5) copying Revelation.



### Sample Size Calculation

In order to determine generalized patterns of implementation of paratextual features for each of the NT scribes without having to take measurements on each folio, statistical methodology was utilized to select a representative sample of folios to measure within the domain of each scribe that could then be used to describe the paratextual feature patterns of each scribe for comparison. Thus, the number of folios sampled (i.e., the folios in which paratextual features were to be measured) and the specific folio numbers for the sample had to be determined.

In order to determine the number of folios to be sampled, initial collections of measurements had to be made from the full-sized *Facsimile*. Four sets of measurements were collected for 3–4 folios for each scribe: upper margin, lower margin, inner margin, and outer margin. The mean and standard deviation (SD) for each of the 4 measurements within a scribe's textual domain were calculated. PASS 2008 (NCSS LLC.; Kaysville, UT, USA) was utilized using a one-way analysis of variance (ANOVA) for the means of 3 groups (i.e., the three scribes). The measurement that returned the greatest sample size was used in order to be conservative (in this case, it was the upper margin, with means of 2.65 cm, 2.47 cm, and 2.96 cm, and an SD of 0.31 cm). It was determined that a sample size of 73 folios was sufficient to detect a difference between scribes with at least 90% power (i.e., there is at least a 90% probability of rejecting the hypothesis that there is no difference between the 3 scribes with respect to paratextual features if there is truly a difference between scribes) using a significance level of  $\alpha=0.05$ .

The specific folios whereby measurements were to be collected were determined via a simple random sample, stratified by scribe, with the number of

folios sampled within each scribe proportional to the number of folios written per scribe (and thus the total number of folios sampled is proportional to the number of folios within each scribe). Folios that did not have two full columns of text or which had tailpiece art (which extended column length slightly) were excluded from the selection process in order to avoid incomplete data. In addition, the sampling weight (i.e., the inverse of the probability of a particular folio being selected) was calculated, which would need to be used in the final analysis of the data. This analysis was conducted using the SAS® System (SAS Institute Inc.; Cary, NC, USA), version 9.2, using the procedure *surveyselect*.

### **Data Collection Methodology**

Measurements were made against images from the full-sized *Facsimile* edition of the codex. A steel ruler, 457mm in length and marked in millimeter increments, was used to take the measurements; readings were made looking straight down at the ruler to avoid parallax error. I prepared a clear transparency film to be used as a guide for determining middle-measurement placement on each page. The template was marked with perpendicular angles and placed to best fit the upper, outer corner of a page to be measured; a line orthogonal to the vertical guideline extending from the upper corner (14.5 cm from the corner) was utilized to determine the row from which the measurement was to be taken. The first complete row of text resting on or above the middle-measure line was used for measurement (see Figure C.1).



Figure C.1: The template in place over the facsimile

On each sample page, 21 measurements using the metal ruler (in cm, to two decimal places) were taken according to the following rules:

Measurement	Notes
Upper Left	Distance between the UL corner of column 1 and the top of page (in cm); measurement taken from top of the first preserved character neither enlarged nor extending above the implied upper boundary (as with $\Phi$ and $\Upsilon$ ).
Upper Middle	Distance between the UL corner of column 2 and the top of page (in cm); same rules as with Upper Left above.
Upper Right	Distance between the UR corner of column 2 and the top of page (in cm); same rules as with Upper Left above.
Outer Top	Distance between the first row of the outermost column to edge of page (in cm).
Outer Middle	Distance between the middle measurement row (as determined by the page template) of the outermost column to edge of page (in cm).
Outer Bottom	Distance between the bottom row of the outermost column to edge of page (in cm).
Lower Left	Distance between the LL corner of column 1 and the bottom of page (in cm); measurement taken from bottom of the first preserved character neither enlarged nor extending below the baseline.
Lower Middle	Distance between the LL corner of column 2 and the bottom of page (in cm); same rules as with Lower Left above.
Lower Right	Distance between the LR corner of column 2 and the bottom of page (in cm); same rules as with Lower Left above.

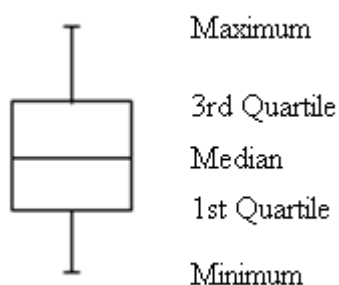
Measurement	Notes
Inner Top	Distance between the first row of the innermost column to edge of page (in cm); if uppermost row was incomplete (due to damage), a lower row was measured unless no complete row was available among the first ten.
Inner Middle	Distance between middle-measurement row (as determined by the page template) of the innermost column and to edge of page (in cm).
Inner Bottom	Distance between last row of the innermost column to edge of page (in cm); same rules as with Inner Top above.
Col. 1 Top	Width of top row of leftmost column (in cm); if the first character was missing (due to damage) or enlarged (and extruded), the horizontal placement of the first character in the second row was used as the left boundary.
Col. 1 Bottom	Width of bottom row of leftmost column (in cm); if the first character was missing (due to damage) or enlarged (and extruded), the horizontal placement of the first character in the row above was used as the left boundary.
Col. 1 Height	Distance from the UL to LL of leftmost column (in cm); if the first character was missing (due to damage) or enlarged, the first preserved character neither enlarged nor extending above the implied upper boundary was used.
Col. 2 Top	Width of top row of rightmost column (in cm); if the first character was missing (due to damage) or enlarged (and extruded), the horizontal placement of the first character in the second row was used as the left boundary.
Col. 2 Bottom	Width of bottom row of rightmost column (in cm); if the first character was missing (due to damage) or enlarged (and extruded), the horizontal placement of the first character in the row above was used as the left boundary.
Col. 2 Height	Distance from the UL to LL of rightmost column (in cm); if the first character was missing (due to damage) or enlarged, the first preserved character neither enlarged nor extending above the implied upper boundary was used.
Space Top	Distance between leftmost character in the top row of left column and rightmost character in the top row of right column (in cm); if the rightmost character of the right column was extruded/enlarged, then the horizontal placement of the first character in the second row was used as the right boundary.
Space Middle	Distance between leftmost character in the middle-measurement row of left column and rightmost character in the middle-measurement row of right column (in cm); if the rightmost character of the right column was extruded/enlarged, then the horizontal placement of the first character in the second row was used as the right boundary. The middle-measurement row was determined from the outer column of the page.
Space Bottom	Distance between leftmost character in the bottom row of left column and rightmost character in the bottom row of right column (in cm); if the rightmost character of the right column was extruded/enlarged, then the horizontal placement of the first character in the row above was used as the right boundary.

### **Data Analysis Methodology**

The means of the upper, lower, inner, and outer margin measurements and space between columns measurements taken in triplicate were calculated. Additionally, the column width measurements taken in duplicate were averaged. The area of each column was calculated from the mean of the column widths and the height of each column. Furthermore, the total written area was calculated using the average width from the leftmost of the first column to the rightmost of the second column (including the space between columns) and the average height of the two columns. A total of 12 paratextual features were used to compare the 3 scribes: upper margin, lower margin, inner margin, outer margin, space between columns, first column width, first column area, second column width, second column area, total writing space width, total writing space height, and total writing space area.

The measurements of these paratextual features were compared between scribes using SAS® System procedure *surveyreg*, with a factor for scribe, stratified by scribe, and weighted using the sampling weights and total number of folios sampled from each scribe from SAS® System procedure *surveyselect* as described previously. Differences between each scribe (i.e., NT Scribe 1 vs. NT Scribe 2; NT Scribe 2 vs. NT Scribe 3; and NT Scribe 1 vs. NT Scribe 3) were determined, and p-values were produced (where a p-value is the probability of obtaining this result if the null hypothesis is true, i.e., if there was really no difference between the scribes for this paratextual feature). If a p-value was below or equal to the pre-determined significance level of  $\alpha=0.05$ , then statistical significance between the 2 scribes being compared for that paratextual feature can be declared.

In addition to formal statistical inference being performed, the data were presented graphically in scatter plots and box plots to look for any patterns in the data. For the scatter plots, the measurements of each paratextual feature was plotted on the y-axis (i.e., the vertical axis), by folio number plotted on the x-axis (i.e., the horizontal axis). For the box plots, a 5-number summary of the paratextual feature measurements (i.e., minimum, first quartile [i.e., the 25th percentile of all measurements within a paratextual feature], median, third quartile [i.e., the 75th percentile], and maximum) was presented graphically by scribe. An example of how to read the results is below:



## APPENDIX D

### EUSEBIAN APPARATUS DATA

The collected data for the analysis of the Eusebian Apparatus is recorded in the tables below, separated according to Gospel. Numbers that are missing are indicated by “--” while numbers that cannot be read clearly are indicated by “.” (with one dot per character). Where number pair positions or canon number values in Alexandrinus vary from NA<sup>27</sup>, the variations are bolded.

**Table D.1: Eusebian Apparatus in Matthew**

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
25:14	269/2	25:14	269/2
25:15	270/5	25:15	[...]/5
25:29	271/2	25:29	271/2
25:30	272/5	25:30	272/5
25:31	273/10	25:31	273/10
26:2	274/1	<b>26:1</b>	274/1
26:3	275/6	26:3	275/6
26:6	276/1	26:6	276/1
26:12	277/4	26:12	<b>277/10</b>
26:14	278/2	26:14	278/2
26:20	279/4	26:20	[. .]9/4
26:22	280/1	26:22	280/1
26:23	281/2	26:23	<b>281/1</b>
26:24b	282/6	26:24b	<b>282/5</b>
26:25	283/10	26:25	<b>283/5</b>
26:26	284/1	26:26	284/1
26:27	285/2	26:27	285/2
26:30	286/6	26:30	286/6
26:31	287/4	26:31	287/4
26:31c	288/6	26:31c	288/6
26:33	289/1	26:33	289/1
26:35	290/6	26:35	290/6

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
26:36	291/1	26:36	291/1
26:36b	292/6	26:36b	292/6
26:38	293/4	26:38	293/4
26:39	294/1	26:39	294/1
26:39c	295/1	26:39c	295/1
26:40c	296/2	<b>26:40</b>	<b>296/1</b>
26:41b	297/4	26:41b	<b>297/2</b>
26:42	298/6	26:42	<b>298/4</b>
26:45	299/4	26:45	299/4
26:47	300/1	26:47	300/1
26:48	301/2	26:48	301/2
26:51	302/1	26:51	302/1
26:52c	303/10	26:52c	303/10
26:55	304/1	26:55	304/1
26:56	305/6	26:56	305/6
26:57	306/1	26:57	306/1
26:58	307/4	26:58	307/4
26:59	308/2	26:59	308/2
26:60b	309/6	<b>26:61</b>	309/6
26:64c	310/1	26:64c	310/1
26:65	311/6	26:65	311/6
26:65c	312/2	<b>26:65d</b>	312/2

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
26:67	313/1	<b>26:66b</b>	313/1
26:69	314/1	26:69	314/1
26:71	315/1	26:71	315/1
26:75	316/2	26:75	316/2
27:1	317/2	27:1	317/2
27:2	318/1	27:2	318/1
27:3	319/10	27:3	319/10
27:11	320/1	27:11	320/1
27:12	321/4	27:12	321/4
27:15	322/2	27:15	322/2
27:16	323/4	27:16	323/4
27:19	324/10	27:19	324/10
27:20	325/1	27:20	325/1
27:22	326/1	27:22	326/1
27:24	327/10	27:24	327/10
27:26	328/1	27:26	328/1
27:27	329/4	27:27	329/4
27:30	330/6	27:30	330/6
27:32	331/1	27:32	331/1
27:33	332/1	27:33	332/1
27:34	333/4	27:34	333/4
27:35	334/1	27:35	334/1

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
27:37	335/1	<b>27:36</b>	335/1
27:38	336/1	27:38	336/1
27:39	337/4	27:39	<b>337/6</b>
27:41	338/2	27:41	338/2
27:44	339/2	<b>27:43c</b>	339/2
27:45	340/2	27:45	340/2
27:46	341/6	27:46	341/6
27:48	342/2	27:48	342/2
27:50	343/1	27:50	343/1
27:51	344/2	27:51	344/2
27:51b	345/10	27:51b	345/--
27:54	346/2	27:54	<b>346/10</b>
27:55	347/6	27:55	<b>347/2</b>
27:57	348/1	27:57	<b>348/6</b>
27:59	349/1	27:59	349/1
27:61	350/6	27:61	350/6
27:62	351/10	27:62	351/10
28:1	352/1	28:1	352/1
28:5	353/2	<b>28:4</b>	353/2
28:8	354/2	28:8	354/2
28:9	355/10	--	--

The Eusebian Apparatus stops at Mark 16:8 and does not continue into the “long ending” that follows.

**Table D.2: Eusebian Apparatus in Mark**

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
1:1	1/2	--	--
1:3	2/1	1:3	2/1
1:4	3/6	1:4	3/6
1:7b	4/1	<b>1:7</b>	4/1
1:9	5/1	1:9	5/1
1:12	6/2	1:12	6/2
1:13c	7/6	1:13c	7/6
1:14	8/4	1:14	8/4
1:14a+	9/6	<b>1:15b</b>	9/6
1:17	10/2	1:17	10/2
1:19	11/6	1:19	11/6
1:21	12/8	1:21	12/8

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
1:22	13/2	1:22	13/2
1:23	14/8	1:23	14/8
1:29	15/2	1:29	15/2
1:34b	16/8	<b>1:34</b>	<b>16/2</b>
1:35	17/8	1:35	17/8
1:40	18/2	1:40	18/2
1:45	19/10	1:45	19/10
2:1	20/1	2:1	20/1
2:13	21/2	2:13	21/2
2:15	22/2	2:15	22/2
2:17	23/2	2:17	23/2
2:23	24/2	2:23	24/2



NA <sup>27</sup>	Eusebian Number	Alexandrinus	
2:27	25/2	2:27	25/2
3:6	26/4	3:6	26/4
3:7b	27/1	3:7b	27/1
3:12	28/8	3:12	28/8
3:14	29/2	<b>3:13</b>	29/2
3:16	30/2	3:16	30/2
3:20	31/10	3:20	31/10
3:22	32/2	<b>3:21</b>	32/2
3:23	33/2	3:23	33/2
3:28	34/2	3:28	34/2
3:31	35/2	3:31	35/2
4:1	36/2	4:1	36/2
4:11c	37/1	4:11c	37/1
4:14	38/2	4:14	38/2
4:21	39/2	4:21	39/2
4:22	40/2	4:22	40/2
4:24	41/2	4:24	41/2
4:25	42/2	4:25	<b>42/10</b>
4:26	43/10	4:26	<b>43/2</b>
4:30	44/2	4:30	44/2
4:33	45/6	4:33	45/6
4:34b	46/10	4:34b	46/10
4:35	47/2	4:35	47/2
5:18	48/8	5:18	48/8
5:21	49/2	5:21	49/2
6:1	50/1	6:1	50/1
6:4	51/1	6:4	51/1
6:6b	52/2	6:6b	52/2
6:7	53/2	<b>6:7c</b>	53/2
6:10	54/2	6:10	54/2
6:11	55/2	6:11	55/2
6:12	56/8	6:12	56/8
6:14	57/2	6:14	57/2
6:15	58/10	6:15	58/10
6:17	59/2	6:17	59/2
6:18	60/6	<b>6:19</b>	60/6
6:30	61/8	6:30	61/8
6:31	62/10	6:31	62/10
6:32	63/6	6:32	63/6
6:35	64/1	6:35	64/1
6:45	65/6	6:45	65/6
6:46	66/2	6:46	66/2
6:47	67/4	6:47	67/4

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
6:51	68/6	<b>6:49</b>	<b>68/10</b>
6:54	69/2	<b>6:51</b>	69/2
7:1	70/10	7:1	<b>70/2</b>
7:5	71/6	7:5	<b>71/10</b>
7:17	72/6	7:17	<b>72/10</b>
7:26b	73/6	7:26b	73/6
7:31	74/10	7:31	74/10
7:36b	75/8	7:36b	75/8
7:37b	76/6	<b>7:37</b>	76/6
8:11	77/4	8:11	77/4
8:12	78/6	8:12	78/6
8:15	79/2	8:15	79/2
8:16	80/6	8:16	80/6
8:22	81/10	8:22	81/10
8:27	82/1	8:27	82/1
8:29c	83/2	<b>8:30</b>	<b>83/6</b>
8:32b	84/6	8:32b	84/6
8:34	85/2	8:34	85/2
8:38	86/2	8:38	86/2
9:1	87/2	9:1	87/2
9:10	88/10	9:10	88/10
9:11	89/6	9:11	89/6
9:14	90/10	9:14	90/10
9:17	91/2	9:17	91/2
9:28	92/10	9:28	92/10
9:30	93/2	9:30	93/2
9:33	94/10	9:33	94/10
9:34	95/2	9:34	95/2
9:37b	96/1	9:37b	96/1
9:38	97/8	9:38	97/8
9:41	98/6	9:41	98/6
9:42	99/2	9:42	99/2
9:43	100/6	9:43	100/6
9:48	101/10	9:48	101/10
9:49	102/2	<b>9:50</b>	102/2
10:1	103/6	10:1	103/6
10:10	104/10	10:10	104/10
10:11	105/2	10:11	105/2
10:13	106/2	10:13	106/2
10:17	107/2	10:17	107/2
10:21c	108/2	<b>10:21</b>	108/2
10:22	109/2	<b>10:23</b>	109/2
10:29	110/2	10:29	<b>110/10</b>

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
10:31	111/2	10:31	111/2
10:32	112/2	10:32	112/2
10:35	113/6	10:35	113/6
10:41	114/2	10:41	114/2
10:45	115/4	10:45	115/4
10:46	116/2	10:46	116/2
11:1	117/2	11:1	117/2
11:4	118/2	11:4	118/2
11:9	119/1	11:9	119/1
11:11	120/6	11:11	120/6
11:15b	121/1	11:15b	121/1
11:18	122/1	11:18	122/.
11:19	123/10	11:19	123/10
11:22	124/6	11:22	124/6
11:24	125/4	11:24	125/4
11:25	126/6	11:25	126/6
11:27	127/2	11:27	127/2
12:1	128/2	12:1	128/2
12:12	129/1	12:12	129/1
12:13	130/2	12:13	130/2
12:28	131/6	12:28	131/6
12:32	132/10	12:32	132/10
12:34d	133/2	12:34d	133/2
12:35	134/2	12:35	134/2
12:38	135/2	12:38	135/2
12:40	136/8	12:40	136/6
13:1	137/2	13:1	137/2
13:3	138/2	13:3	138/2
13:9	139/1	13:9	139/1
13:10	140/6	13:10	140/6
13:11	141/2	13:11	141/2
13:14	142/6	13:12	142/2
13:14c	143/2	13:14c	143/2
13:17	144/2	13:17	144/2
13:18	145/6	13:18	145/6
13:19	146/2	13:19	146/2
13:20	147/6	13:20	147/6
13:21	148/2	13:21	148/2
13:22	149/6	13:22	149/6
13:24	150/2	13:24	150/2
13:26	151/2	13:26	151/2
13:32	152/6	13:32	152/6
13:33	153/6	13:33	. 53/6

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
13:34	154/2	13:34	154/2
13:35	155/2	13:35	155/2
14:1	156/1	14:1	156/1
14:1b	157/6	14:1b	157/6
14:3	158/1	14:3	158/1
14:8	159/4	14:8	159/4
14:10	160/2	14:10	160/2
14:17	161/4	14:17	161/1
14:19	162/1	14:19	162/1
14:20	163/2	14:20	163/2
14:21c	164/6	14:21c	164/6
14:22	165/1	14:22	165/1
14:23	166/2	14:23	166/2
14:26	167/6	14:26	167/6
14:27b	168/4	14:27	168/4
14:27c	169/6	14:27c	169/6
14:29	170/1	14:29	170/1
14:31	171/6	14:31	171/6
14:32	172/1	14:32	172/4
14:32b	173/6	14:32b	173/1
14:34	174/4	14:34	174/4
14:35	175/1	14:35	175/2
14:36d	176/1	14:36d	176/4
14:37	177/2	--	--
14:38b	178/4	14:38b	178/6
14:39	179/6	14:40	179/4
14:41	180/4	14:41f	180/1
14:43	181/1	14:43	181/2
14:44	182/2	14:44	182/2
14:47	183/1	14:47	183/1
14:48	184/1	14:48	184/1
14:49b	185/6	--	--
14:51	186/10	--	--
14:53	187/1	14:53	187/1
14:54	188/4	14:54	188/4
14:55	189/2	14:55	189/2
14:57	190/6	14:57	190/6
14:62	191/1	14:62	191/1
14:63	192/6	14:63	192/6
14:63b	193/2	14:63b	193/2
14:65	194/1	14:65	194/1
14:66	195/1	14:66	195/1
14:68c	196/1	14:68c	196/1

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
14:72b	197/2	14:72b	197/2
15:1	198/2	15:1	198/2
15:1a+	199/1	15:1a+	199/1
15:2	200/1	15:2	200/1
15:4	201/4	15:2c	201/4
15:6	202/2	15:6	202/2
15:7	203/4	15:7	203/4
15:11	204/1	15:11	204/1
15:12	205/1	15:12	205/1
15:15	206/1	15:15	206/4
15:16	207/4	15:16	207/4
15:20	208/6	15:20	208/6
15:21	209/1	15:21	209/1
15:22	210/1	15:22	210/1
15:23	211/4	15:23	211/4
15:24	212/1	15:24	212/1
15:25	213/10	15:25	213/10
15:26	214/1	15:26	214/1
15:27	215/1	15:27	215/8

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
15:28	216/8	15:27a+	216/6
15:29	217/6	15:29	217/2
15:31	218/2	15:31	218/2
15:32b	219/2	15:32b	219/2
15:33	220/2	15:33	220/6
15:34	221/6	15:34	221/2
15:36	222/2	15:36	222/1
15:37	223/1	[...]	[...]
15:38	224/2	[...]	[...]
15:39	225/2	15:39	225/2
15:40	226/6	15:40	226/6
15:42	227/1	15:42	227/1
15:46	228/1	15:46	228/1
15:47	229/6	15:47	229/1
16:1	230/8	16:1	230/8
16:2	231/1	16:2	231/1
16:6	232/2	16:8	232/3
16:8	233/2	--	--

Table D.3: Eusebian Number Positions in Luke

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
1:1	1/10	[...]	[...]
1:35	2/5	1:19	2/5
1:36	3/10	1:20	3/10
2:47	4/2	2:47	4/2
2:48b	5/10	2:48	5/10
3:1	6/3	3:1	6/10
3:3	7/1	3:3	7/1
3:7	8/5	3:7	8/2
3:10	9/10	3:10	9/10
3:16b	10/1	3:16	10/1
3:17	11/5	3:17	11/5
3:19	12/2	3:19	12/2
3:21	13/1	3:21	13/1
3:23	14/3	3:23	14/10
4:1	15/2	4:1	15/2
4:2b	16/5	4:2c	16/5
4:14	17/1	4:14	17/1
4:16	18/10	4:16	18/10

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
4:22	19/1	4:22	19/1
4:23	20/10	4:23	20/10
4:24	21/1	4:24	21/1
4:25	22/10	4:25	22/10
4:31	23/8	4:31	23/8
4:32	24/2	4:32	24/3
4:33	25/8	4:33	25/8
4:38	26/2	4:38	26/2
4:41	27/8	--	--
4:42	28/8	--	--
5:1	29/10	--	--
5:4	30/9	5:4	30/9
5:8	31/10	5:8	31/30
5:10b	32/2	5:10b	32/2
5:12	33/2	5:12	33/2
5:15	34/1	5:15	34/1
5:16	35/2	5:16	35/2
5:17	36/2	5:17	36/2

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
5:18	37/1	5:18	37/1
5:27	38/2	5:27	38/2
5:29	39/2	5:29	39/2
5:31	40/2	5:31	40/2
6:1	41/2	6:1	41/2
6:6	42/2	6:6	42/2
6:12	43/2	6:12	43/2
6:13	44/2	6:13	44/2
6:17	45/1	6:17	45/1
6:20	46/5	6:20	46/5
6:21	47/5	6:21	47/5
6:21b	48/5	6:21b	48/5
6:22	49/5	6:22	49/5
6:24	50/10	6:24	50/10
6:26	51/10	<b>6:25</b>	51/10
6:27	52/5	6:27	52/5
6:29	53/5	6:29	53/5
6:31	54/5	6:31	54/5
6:32	55/5	6:32	55/5
6:36	56/2	<b>6:37</b>	56/2
6:39	57/5	6:39	57/5
6:40	58/3	6:40	58/3
6:41	59/5	6:41	59/5
6:43	60/6	6:43	<b>60/5</b>
6:44b	61/5	6:44b	61/5
6:45	62/5	6:45	62/5
6:46	63/3	6:46	63/3
6:47	64/5	6:47	64/5
7:1	65/3	7:1	<b>65/2</b>
7:10	66/5	7:10	66/5
7:11	67/10	7:11	67/10
7:17	68/10	[...]	[...]
7:18	69/5	7:18	69/5
7:27	70/2	7:27	70/2
7:28	71/5	7:28	71/5
7:29	72/10	7:29	72/10
7:31	73/5	7:31	73/5
7:36	74/1	7:36	<b>74/10</b>
8:1	75/10	8:1	75/10
8:4	76/2	8:4	76/2
8:10c	77/1	8:10c	77/1
8:11	78/2	8:11	78/2
8:16	79/2	8:16	79/2

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
8:17	80/2	8:17	80/2
8:18	81/5	8:18	<b>81/2</b>
8:19	82/2	8:19	82/2
8:22	83/2	8:22	83/2
8:37b	84/8	<b>8:38</b>	84/8
8:40	85/2	8:40	<b>85/10</b>
9:1	86/2	--	--
9:3	87/2	--	--
9:5	88/2	--	--
9:6	89/8	--	--
9:7	90/2	--	--
9:10	91/8	--	--
9:10b	92/3	--	--
9:12	93/1	--	--
9:18	94/1	--	--
9:21	95/2	--	--
9:23	96/2	--	--
9:26	97/2	--	--
9:27	98/2	--	--
9:37	99/2	--	--
9:43	100/8	--	--
9:43b	101/2	--	--
9:46	102/2	9:46	102/2
9:49	103/8	9:49	103/8
9:51	104/10	9:51	104/10
9:57	105/5	<b>9:56b</b>	105/5
9:61	106/10	9:61	106/10
10:1	107/10	10:1	107/10
10:2	108/5	10:2	<b>108/6</b>
10:3	109/5	10:3	109/5
10:4	110/2	10:4	110/2
10:5	111/5	10:5	111/5
10:7	112/2	<b>10:6b</b>	112/2
10:7c	113/10	<b>10:8</b>	113/10
10:10	114/2	10:10	114/2
10:13	115/5	10:13 <sup>1</sup>	115/5
10:16	116/1	10:16	116/1
10:17	117/10	10:17	117/10
10:21	118/5	10:21	<b>118/1</b>
10:22	119/3	10:22	<b>119/10</b>

<sup>1</sup> This entry is uniquely on the line where the spacing separates the verse, and not at the *ekthesis* of the following line.

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
10:23	120/5	10:23	120/5
10:25	121/2	10:25	121/2
10:29	122/10	10:29	122/2
11:1	123/5	11:1	123/5
11:5	124/10	11:5	124/10
11:9	125/5	11:9	125/5
11:14	126/5	11:14	126/5
11:15	127/2	11:15	127/2
11:16	128/5	11:16	128/5
11:17	129/2	11:17	129/2
11:24	130/5	11:24	130/5
11:27	131/10	11:27	131/10
11:29	132/5	11:29	132/2
11:33	133/2	11:33	133/2
11:34	134/5	11:34	134/5
11:37	135/5	11:37	135/2
11:42	136/5	11:42	136/5
11:43	137/2	11:43	137/2
11:44	138/5	11:44	138/2
11:45	139/5	11:45	139/5
11:47	140/5	11:47	140/5
11:49	141/5	11:49b	141/5
11:52	142/5	11:52	142/5
11:53	143/10	11:53	143/10
12:1b	144/2	12:1b	144/5
12:2	145/5	12:2	145/10
12:9	146/2	12:4	146/2
12:10	147/2	12:10	147/2
12:11	148/2	12:11	148/2
12:13	149/10	12:13	149/10
12:22	150/5	12:15	150/5
12:32	151/10	12:32	151/10
12:33	152/2	12:33	152/2
12:33c	153/5	12:34	153/5
12:35	154/10	12:35	154/5
12:37	155/5	12:37	155/5
12:39	156/2	12:39	. 56/.
12:41	157/5	12:41	157/5
12:45	158/5	12:45	158/5
12:47	159/10	12:47	159/5
12:49	160/5	12:49	160/5
12:54	161/5	12:54	161/5
12:58	162/5	12:58	162/5

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
13:1	163/10	13:1	163/10
13:6	164/10	13:6	164/10
13:14	165/2	13:14	165/5
13:17	166/10	13:17	166/10
13:18	167/2	13:18	167/2
13:20	168/5	13:20	168/2
13:22	169/2	13:22	169/5
13:23	170/5	13:23	170/2
13:25	171/5	13:25	171/5
13:28b	172/5	[...]	[...]
13:30	173/2	13:30	173/2
13:31	174/10	13:31	174/10
13:34	175/5	13:34	175/5
14:1	176/10	14:1	176/10
14:5	177/2	14:5	177/5
14:7	178/10	14:7	178/10
14:11	179/5	14:10c	179/5
14:12	180/10	14:12	180/10
14:16	181/5	14:16	181/5
14:25	182/5	14:25	182/5
14:28	183/10	14:28	183/10
14:33	184/5	14:33	184/5
14:34	185/2	14:34	185/2
15:1	186/2	15:1	186/2
15:3	187/5	15:3	187/5
15:8	188/10	15:7	188/5
15:10	189/5	15:10	189/5
15:11	190/10	15:11	190/10
16:13	191/5	16:13	191/5
16:14	192/10	16:14	192/10
16:16	193/5	16:16	193/5
16:17	194/5	16:17	194/2
16:18	195/2	16:18	195/--
16:19	196/10	16:19	196/10
17:1	197/2	17:1	197/5
17:3	198/5	17:3	198/5
17:3c	199/5	17:4	199/5
17:5	200/5	17:5	200/10
17:7	201/10	17:7	201/5
17:20	202/5	17:20	202/5
17:22	203/10	17:22	203/10
17:23	204/2	17:23	204/2
17:24	205/5	17:24	205/5

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
17:25	206/2	17:25	206/2
17:26	207/5	17:26	207/5
17:28	208/10	17:28	208/10
17:31	209/2	17:31	209/2
17:32	210/10	17:32	210/10
17:33	211/3	<b>17:34</b>	211/3
17:34	212/5	<b>17:37</b>	212/5
17:37	213/5	<b>18:1</b>	213/5
18:1	214/10	<b>18:2b</b>	214/10
18:14c	215/5	8:14c	215/5
18:15	216/2	18:15	216/2
18:17	217/2	18:17	217/2
18:18	218/2	18:18	218/2
18:22	219/2	18:22	219/2
18:23	220/2	18:23	220/2
18:29	221/2	--	--
18:31	222/2	18:31	222/2
18:34	223/10	18:34	223/10
18:35	224/2	18:35	224/2
19:1	225/10	19:1	225/10
19:10	226/5	19:10	226/5
19:11	227/10	19:11	227/10
19:12	228/2	19:12	228/2
19:13	229/5	19:13	229/5
19:26	230/2	19:26	230/2
19:27	231/5	19:27	231/5
19:28	232/2	19:28	232/2
19:32	233/2	19:32	233/2
19:37	234/1	19:37	234/1
19:39	235/5	19:39	235/5
19:41	236/10	19:41	236/10
19:44b	237/2	19:44b	237/2
19:45	238/1	19:45	238/1
19:47	239/1	19:47	239/1
20:1	240/2	20:1	240/2
20:9	241/2	20:9	241/2
20:19	242/1	20:19	242/1
20:20	243/2	20:20	243/2
20:40	244/2	<b>20:39</b>	244/2
20:41	245/2	20:41	245/2
20:45	246/2	20:45	246/2
20:47	247/8	20:47	247/8
21:5	248/2	21:5	248/2

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
21:7	249/2	21:7	249/2
21:12	250/1	21:12	250/1
21:14	251/2	21:14	251/2
21:20	252/10	21:20	252/10
21:21	253/2	21:21	253/2
21:23	254/2	21:23	254/2
21:23b	255/2	21:23b	255/2
21:24	256/10	21:24	256/10
21:25	257/2	21:25	<b>257/5</b>
21:27	258/2	<b>21:26b</b>	258/2
21:34	259/10	21:34	259/10
22:1	260/1	22:1	260/1
22:2	261/1	22:2	261/1
22:3	262/9	22:3	262/9
22:4	263/2	22:4	263/2
22:14	264/10	<b>22:15</b>	264/10
22:16	265/2	22:16	265/2
22:19	266/1	22:19	266/1
22:20	267/2	22:20	267/2
22:21	268/2	22:21	268/2
22:23	269/1	22:23	269/1
22:24	270/2	22:24	270/2
22:27	271/10	<b>22:26</b>	271/10
22:30b	272/5	<b>22:29</b>	272/5
22:31	273/10	22:31	273/10
22:32b	274/9	22:32c	274/9
22:33	275/1	22:33	275/1
22:35	276/10	22:35	276/10
22:37	277/8	22:37	277/8
22:38	278/10	<b>22:37d</b>	<b>278/1</b>
22:39	279/1	<b>22:38</b>	279/1
22:40	280/2	<b>22:39</b>	280/2
22:41	281/1	<b>22:40</b>	281/1
22:42	282/1	<b>22:41</b>	282/1
22:43	283/10	<b>22:42c</b>	283/10
22:45	284/2	22:45	284/2
22:47	285/1	22:47	<b>285/4</b>
22:47c	286/2	<b>22:48</b>	286/2
22:49	287/1	22:49	287/1
22:51	288/10	22:51	288/10
22:52	289/1	22:52	289/1
22:54	290/1	22:54	290/1
22:54c	291/1	22:54c	291/1

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
22:58	292/1	<b>22:57</b>	292/1
22:61b	293/2	22:61b	293/2
22:63	294/1	22:63	294/1
22:66	295/2	22:66	295/2
22:67c	296/10	22:67c	296/10
22:69	297/1	22:69	297/1
22:70	298/10	<b>22:70c</b>	298/10
22:71	299/2	22:71	299/2
23:1	300/1	23:1	<b>300/10</b>
23:2	301/10	23:2	301/10
23:3	302/1	[...]	[...]
23:4	303/9	[...]	[...]
23:5	304/10	23:5	304/10
23:10	305/2	<b>23:6</b>	305/2
23:11	306/10	23:11	306/10
23:13	307/9	23:13	307/9
23:15	308/10	<b>23:14b</b>	308/10
23:17	309/2	<b>23:14c</b>	309/2
23:18	310/1	23:18	310/1
23:20	311/1	23:20	<b>311/4</b>
23:22	312/9	23:22	312/9
23:23	313/1	23:23	313/1
23:24	314/1	23:24	<b>314/4</b>
23:26	315/1	<b>23:25b</b>	315/1
23:27	316/10	23:27	316/10
23:32	317/1	23:32	317/1

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
23:33	318/1	23:33	318/1
23:33a+	319/1	23:33a+	319/1
23:34	320/10	23:34	<b>320/1</b>
23:34d	321/1	23:34d	<b>321/2</b>
23:35b	322/2	23:35b	322/2
23:36	323/2	23:36	<b>323/1</b>
23:38	324/1	23:38	<b>324/2</b>
23:39	325/2	23:39	325/2
23:40	326/10	23:40	326/10
23:44	327/2	23:44	327/2
23:45b	328/2	<b>23:45</b>	<b>328/1</b>
23:46	329/1	23:46	<b>329/2</b>
23:47	330/2	23:47	<b>330/10</b>
23:48	331/10	23:48	<b>331/2</b>
23:50	332/1	23:50	332/1
23:53	333/1	23:53	333/1
23:54	334/10	<b>23:55</b>	334/10
23:56	335/8	23:56	335/8
24:1	336/1	24:1	336/1
24:5	337/2	24:5	337/2
24:9	338/2	24:9	338/2
24:10	339/10	24:10	339/10
24:36	340/9	24:36	<b>340/10</b>
24:41	341/9	24:41	<b>341/1</b>
24:44	342/10	24:44	342/10

Table D:4 Eusebian Number Positions in John

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
1:1	1/3	1:1	<b>1/10</b>
1:6	2/3	1:6	2/3
1:9	3/3	1:9	<b>3/10</b>
1:11	4/10	<b>1:14</b>	4/10
1:14	5/3	--	--
1:15	6/1	1:15	<b>6/10</b>
1:16	7/10	1:16	7/10
1:18	8/3	1:18	<b>8/2</b>
1:19	9/10	1:19 <sup>2</sup>	9/10

<sup>2</sup> No spacing or *ekthesis* accompanies this Eusebian number pair.

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
1:23	10/1	1:23	10/1
1:24	11/10	1:24	11/10
1:26	12/1	1:26	12/1
1:28	13/10	1:28	13/10
1:30	14/1	1:30	14/1
1:32	15/1	1:32	15/1
1:35	16/10	1:35	16/10
1:41	17/1	1:41	17/1
1:43	18/10	1:43	18/10
2:12	19/7	2:12	<b>19/4</b>
2:13	20/1	2:13	20/1
2:14	21/1	2:14	21/1

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
2:17	22/10	2:17	22/10
2:18	23/4	--	--
2:19	24/10	2:19	24/1
3:23	25/3	3:23	25/3
3:24	26/4	3:24	26/1
3:25	27/10	3:25	27/1
3:28	28/1	3:28	28/1
3:29	29/10	3:29	29/10
3:35	30/3	3:35	30/3
3:36	31/10	3:36	31/10
4:3	32/7	4:2	32/7
4:4	33/10	4:5	33/10
4:43	34/7	4:43	34/7
4:44	35/1	4:44	35/1
4:45	36/10	4:45	36/10
4:46b	37/3	4:46	37/3
5:1	38/1	5:1	38/1
5:11	39/10	--	--
5:23b	40/1	5:23b	40/1
5:24	41/10	5:24	41/10
5:30d	42/1	5:30	42/1
5:31	43/10	5:31	43/10
5:37b	44/3	5:37b	44/3
5:38	45/10	5:37c	45/10
6:1	46/1	6:1	46/1
6:3	47/3	6:3	47/3
6:4	48/1	6:4	48/1
6:5	49/1	6:5	49/1
6:14	50/10	6:14	50/10
6:15b	51/4	6:15	51/3
6:22	52/10	6:22	52/10
6:30	53/4	6:30	53/4
6:31	54/10	6:31	54/10
6:35	55/1	6:32	55/1
6:35c	56/10	6:35d	56/10
6:38	57/1	6:37	57/1
6:39	58/10	6:39	58/10
6:41	59/1	6:41	59/1
6:43	60/10	6:43	60/10
6:46	61/3	6:45c	61/3
6:47	62/10	6:47	62/10
6:48	63/1	6:48	63/1
6:49	64/10	6:49	64/10

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
6:51	65/1	.	.
6:52	66/10	.	.
6:55	67/1	.	.
6:56	68/10	.	.
6:62	69/1	.	.
6:63	70/4	.	.
6:63b	71/10	.	.
6:64b	72/4	.	.
6:65	73/10	.	.
6:68	74/1	.	.
6:70	75/10	.	.
7:28	76/3	.	.
7:30	77/1	.	.
7:31	78/10	.	.
7:32b	79/1	.	.
7:33	80/10	.	.
7:34	81/10	.	.
7:40	82/7	.	.
7:41c	83/7	.	.
7:43	84/10	.	.
7:44	85/1	.	.
7:45	86/10	.	.
8:19	87/3	.	.
8:20	88/1	.	.
8:21	89/10	.	.
10:14	90/3	10:15	90/3
10:15b	91/4	10:15b	91/4
10:16	92/10	10:16	92/10
10:39	93/4	10:39	93/1
10:41	94/10	10:41	94/10
11:53	95/4	11:53	95/1
11:55	96/1	11:55	96/1
11:55b	97/10	11:56 <sup>3</sup>	97/10
12:2	98/1,4	12:2	98/1
12:9	99/10	12:9	99/10
12:12	100/1	12:12	100/1
12:14	101/7	12:14	101/7
12:16	102/10	12:16	102/10
12:23	103/4	12:23	103/4
12:24	104/10	12:24	104/10
12:25	105/3	12:25	105/3

<sup>3</sup> This number is accompanied by a space, but is without *ekthesis*.



NA <sup>27</sup>	Eusebian Number	Alexandrinus	
12:26	106/10	12:26	106/10
12:26+	107/4	<b>12:27</b>	107/4
12:27d	108/10	[...]	[...]
12:39	109/1	12:39	109/1
12:41	110/10	12:41	110/10
12:44	111/1	12:44	111/1
12:46	112/10	12:46	112/10
13:2	113/9	13:2	<b>113/1</b>
13:3	114/3	13:3	114/3
13:3b	115/10	13:3b	115/10
13:13	116/3	13:13	116/3
13:14	117/10	13:14	117/10
13:16	118/3	13:16	118/3
13:18	119/10	13:18	119/10
13:20	120/1	13:20	120/1
13:21	121/4	13:21	121/4
13:22	122/1	13:22	122/1
13:23	123/10	13:23	123/10
13:26c	124/9	<b>13:27</b>	124/9
13:27b	125/10	13:27b	125/10
13:36	126/1	[...]	[...]
14:1	127/10	[...]	[...]
14:13	128/4	<b>14:15</b>	128/4
14:21b	129/1	14:21b	129/1
14:22	130/10	14:22	130/10
14:24b	131/1	14:24b	131/1
14:26	132/10	<b>14:25</b>	132/10
15:7	133/4	15:7	133/4
15:8	134/10	15:8	134/10
15:13	135/4	<b>15:12</b>	135/4
15:14	136/10	15:14	<b>136/4</b>
15:16f	137/4	<b>15:17</b>	137/4
15:17	138/10	<b>15:18</b>	138/10
15:20	139/3	15:20	139/3
15:20c	140/10	<b>15:20b</b>	140/10
15:21	141/1	15:21	141/1
15:21b	142/3	<b>15:22</b>	142/3
15:22	143/10	<b>15:22b</b> <sup>4</sup>	143/10
15:23	144/1	15:23	<b>144/10</b>
15:24	145/10	15:24	145/10

<sup>4</sup> This number has neither space nor *ekthesis*, but may have an in-line *paragraphus* inserted into the text.

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
16:2b	146/1	[...]	[...]
16:4b	147/10	16:4b	147/10
16:15	148/3	16:15	148/3
16:15b	149/10	<b>16:16</b>	149/10
16:23b	150/4	16:23b	150/4
16:25	151/10	16:25	151/10
16:31	152/4	16:31	152/4
16:33	153/10	16:33	153/10
17:25	154/3	[...]	[...]
17:25c	155/10	[...]	[...]
18:1	156/1	18:1	[..]6/.
18:2	157/10	18:2	157/10
18:3	158/1	18:3	158/1
18:4	159/10	18:4	<b>159/1</b>
18:10	160/1	18:10	160/1
18:11c	161/1	--	--
18:12	162/1	--	--
18:13	163/10	18:13	<b>163/1</b>
18:15	164/4	18:15	164/4
18:15b	165/10	<b>18:15c</b>	165/10
18:16	166/1	18:16	166/1
18:16b	167/10	18:16b	167/10
18:17	168/1	18:17	168/1
18:18	169/10	18:18	169/10
18:20	170/1	18:20	170/1
18:21	171/10	18:21	171/10
18:22	172/1	18:22	172/1
18:23	173/10	18:23	173/10
18:24	174/1	18:24	174/1
18:25	175/1	18:25	175/1
18:28	176/1	18:28	176/1
18:28c	177/10	18:28c	177/10
18:33	178/1	18:33	178/1
18:34	179/10	18:34	179/10
18:37	180/1	18:37	180/1
18:37e	181/10	18:37e	181/10
18:38c	182/9	18:38c	182/9
18:39	183/4	18:39	<b>183/1</b>
18:40	184/1	18:40	184/1
19:1	185/4	19:1	185/4
19:4	186/9	19:4	186/9
19:5	187/4	19:5	<b>187/9</b>
19:6	188/1	19:6	188/1

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
19:6c	189/10	19:6c	189/10
19:6e	190/9	19:6e	190/10
19:7	191/10	19:7	191/10
19:8	192/4	19:8	192/4
19:10	193/10	19:9d	193/10
19:15	194/1	9:14c	194/1
19:15c	195/10	19:15c	195/10
19:16	196/1	19:16	196/1
19:17	197/1	19:17	197/.
19:18b	198/1	19:18b	198/1
19:19	199/1	19:19	199/1
19:20	200/10	19:20	200/1
19:23	201/1	19:23	201/10
19:24f	202/10	19:25	202/10
19:28	203/4	19:28	203/1
19:30c	204/1	19:30c	204/1
19:31	205/10	19:31	205/10
19:38	206/1	19:38	206/1
19:39	207/10	19:39	207/1
19:40	208/1	19:40	208/1
20:1	209/1	20:1	209/1
20:2	210/10	20:2	210/5

NA <sup>27</sup>	Eusebian Number	Alexandrinus	
20:11	211/1	20:10	211/1
20:13	212/10	20:13	212/10
20:19	213/9	20:19	213/9
20:20b	214/10	20:20b	214/10
20:23	215/7	[...]	[...]
20:24	216/10	20:24	216/10
20:26	217/9	20:26	217/8
20:28	218/10	20:28	218/10
21:1	219/9	21:1	219/9
21:7	220/10	21:7	220/10
21:9	221/9	21:9	221/9
21:11	222/9	21:11	222/4
21:12	223/9	21:12	223/5
21:12c	224/10	21:12c	224/10
21:13	225/9	21:13	225/9
21:14	226/10	21:14	226/10
21:15e	227/9	21:15e	227/10
21:16	228/10	21:16	228/9
21:16e	229/9	21:16e	229/10
21:17	230/10	21:17	230/9
21:17h	231/9	21:18	231/10
21:18	232/10	--	--

## APPENDIX E

### UNIT DELIMIATION DATA

In the *Paragraphus* column of the following tables, a mark of “--” indicates data that is unavailable due to damage to the manuscript, a table element in square brackets (e.g. [X]) indicates unclear data that are certain enough to be marked present, “X” indicates a *paragraphus* mark of some kind, and “XX” indicates a double *paragraphus* (see Chapter 5).

**Table E.1: Paragraphing in Matthew**

Verse	Space	Ekthesis	Para-graphus
25:7		X	--
25:11	X	X	
25:12b		X	
25:14		X	X
25:15	X	X	
25:19	X	X	
25:21		X	
25:22	X	X	
25:23		X	
25:24		X	
25:26		X	
25:29	X	X	
25:30	X	X	
25:31	X	X	X
25:34b	X	X	
25:37		X	
25:40	X	X	
25:41	X	X	
25:44	X	X	
25:45	X	X	

Verse	Space	Ekthesis	Para-graphus
26:1	X	X	
26:3	X	X	
26:5	X	X	
26:6	X	X	X
26:8	X	X	
26:10	X	X	
26:12	X	X	
26:13	X	X	
26:14	X	X	X
26:17		X	X
26:18		X	
26:20		X	--
26:21		X	
26:22	X	X	
26:23	X	X	
26:24b	X	X	
26:25	X	X	
26:26	X	X	[X]
26:27	X	X	
26:29		X	

Verse	Space	Ekthesis	Para-graphus
26:30	X	X	
26:31	X	X	
26:31c		X	
26:33		X	
26:35	X	X	
26:36	X	X	
26:36b	X	X	
26:38	X	X	
26:39	X	X	
26:40	X	X	
26:41b	X	X	
26:42	X	X	
26:43	X	X	
26:45		X	
26:47	X	X	
26:48		X	X
26:50	X	X	
26:51	X		
26:52c	X	X	
26:55	X	X	
26:56	X	X	
26:57	X	X	
26:58	X	X	
26:59		X	X
26:61	X	X	
26:64c		X	
26:65	X	X	
26:65d	X	X	
26:66b	X	X	
26:69	X	X	X
26:71		X	
26:75		X	X
27:1	X	X	
27:2	X	X	
27:3	X	X	XX
27:9b	X	X	
27:11	X	X	
27:12	X	X	X
27:15	X	X	
27:16		X	
27:19	X	X	
27:20	X	X	
27:22	X	X	

Verse	Space	Ekthesis	Para-graphus
27:24	X	X	
27:26	X	X	
27:27	X	X	
27:30		X	
27:32		X	
27:33	X	X	
27:34	X	X	
27:35	X	X	
27:36	X	X	
27:38	X	X	
27:39	X	X	
27:41	X	X	
27:43c	X	X	
27:44	X		
27:45	X	X	
27:46	X	X	
27:48	X	X	
27:50	X	X	
27:51	X	X	
27:51b	X	X	
27:54	X	X	
27:55	X	X	
27:57	X	X	X
27:58b	X	X	
27:59	X	X	XX
27:61	X	X	
27:62	X	X	
28:1	X	X	
28:4	X	X	
28:6	X		X
28:8	X	X	
28:10		X	
28:11	X	X	
28:12		X	
28:15	X	X	
28:16	X	X	
28:18b	X	X	
28:19	X	X	

Table E.2: Paragraphing in Mark

Verse	Space	Ekthesis	Para-graphus
1:1		X	
1:2b		X	
1:3	X	X	
1:4	X	X	
1:5		X	
1:7		X	
1:9	X	X	
1:12	X	X	
1:13c		X	
1:14		X	
1:15b	X	X	
1:17	X	X	
1:19	X	X	
1:21	X	X	X
1:22	X	X	
1:23		X	X
1:29	X	X	X
1:30	X	X	
1:32		X	X
1:34	X	X	
1:35		X	
1:40	X	X	XX*
1:41	X	X	
1:45	X	X	
2:1	X	X	
2:3	X	X	X
2:6	X	X	
2:10		X	
2:13		X	
2:14		X	
2:15	X	X	
2:17	X	X	
2:20	X	X	
2:23	X	X	XX
2:24		X	
2:27	X	X	
2:28	X		
3:1		X	X
3:6	X	X	
3:7b	X	X	
3:12		X	
3:13		X	X

Verse	Space	Ekthesis	Para-graphus
3:16	X	X	
3:20	X	X	
3:21	X	X	
3:23	X	X	
3:28	X	X	
3:31	X	X	
3:34		X	
4:1	X	X	
4:3b	X	X	
4:8	X	X	
4:10		X	
4:11c	X	X	
4:14		X	
4:16	X	X	
4:18	X	X	
4:20		X	
4:21		X	
4:22	X	X	
4:24		X	
4:25	X	X	
4:26	X	X	
4:30	X	X	
4:33	X	X	
4:34b	X	X	
4:35		X	X
5:2	X	X	X
5:6	X	X	
5:13b	X	X	
5:15		X	
5:18	X	X	
5:20		X	X
5:21	X	X	
5:22	X	X	X
5:25	X	X	XX
5:35	X	X	
5:38	X	X	
6:1	X	X	
6:4	X	X	
6:6b	X	X	X
6:7c		X	
6:10	X	X	
6:11	X	X	

Verse	Space	Ekthesis	Para-graphus
6:11+	X	X	
6:12	X	X	
6:14	X	X	X
6:15	X	X	
6:17	X	X	
6:19	X	X	
6:21	X	X	
6:30	X	X	
6:31	X	X	
6:32	X	X	
6:34	X	X	XX
6:35	X	X	XX
6:38	X	X	
6:40	X	X	
6:42		X	
6:45	X	X	
6:46	X	X	
6:47	X	X	XX
6:49	X	X	
6:51	X	X	
6:53	X	X	
6:54	X	X	
7:1	X	X	
7:5	X	X	X
7:6	X	X	
7:6d	X	X	
7:9	X	X	X
7:14	X	X	
7:17	X	X	
7:21	X	X	
7:24	X	X	X
7:26b	X	X	
7:31	X	X	X
7:36b	X	X	
7:37	X	X	
7:37c	X	X	
8:1		X	X
8:8	X	X	
8:10	X	X	
8:11	X	X	
8:12	X	X	
8:12c	X	X	
8:15	X	X	X

Verse	Space	Ekthesis	Para-graphus
8:16		X	
8:20	X	X	
8:22	X	X	X
8:27	X	X	X
8:29		X	
8:30	X	X	
8:32b	X	X	
8:34		X	
8:36	X	X	
8:38	X	X	
9:1	X	X	
9:2	X	X	X
9:9	X	X	
9:10	X	X	
9:11	X	X	
9:14	X	X	X <sup>1</sup>
9:16		X	
9:17		X	X
9:21	X	X	
9:25	X	X	
9:27		X	
9:28	X	X	X
9:30	X	X	
9:33	X	X	X
9:34	X	X	
9:37b		X	
9:38	X	X	
9:41	X	X	
9:42	X	X	
9:43	X	X	
9:45		X	
9:47		X	
9:48		X	
9:50		X	
10:1	X	X	XX
10:4b		X	
10:10		X	
10:11	X	X	
10:13	X	X	
10:17	X	X	X

---

<sup>1</sup> There is only an in-line *paragraphus* here.

Verse	Space	Ekthesis	Para-graphus
10:21	X	X	
10:21b	X	X	
10:22	X	X	
10:23		X	
10:24b		X	
10:27	X	X	
10:28	X	X	
10:29	X	X	
10:31	X	X	
10:32	X	X	
10:32e	X	X	
10:35	X	X	X
10:37	X	X	
10:41	X	X	
10:45		X	
10:46	X	X	X
10:50	X	X	
11:1		X	X
11:4	X	X	
11:6		X	
11:7b		X	
11:9		X	
11:11	X	X	
11:12	X	X	X
11:15	X		
11:15b	X	X	
11:16	X	X	
11:18	X	X	
11:19	X	X	
11:22	X	X	X
11:24		X	
11:25	X	X	
11:27	X	X	X
11:29	X	X	
11:33c		X	
12:1	X	X	X
12:4	X	X	
12:6		X	
12:10		X	
12:12		X	
12:13		X	†
12:16b		X	
12:18	X	X	X

Verse	Space	Ekthesis	Para-graphus
12:24	X	X	
12:26	X	X	
12:28	X	X	X
12:29c	X	X	
12:32		X	
12:34d	X	X	
12:37		X	
12:38		X	
12:40	X	X	
12:41	X	X	X
12:44b		X	
13:1	X	X	X
13:3		X	XX
13:5	X	X	
13:7	X	X	
13:8	X	X	
13:9	X	X	
13:10		X	
13:11		X	
13:12	X	X	
13:14	X	X	
13:14c	X	X	
13:17		X	
13:18	X	X	
13:19	X	X	
13:20	X	X	
13:21	X	X	
13:22	X	X	
13:23	X	X	
13:24	X	X	
13:26	X	X	
13:28		X	
13:29	X	X	
13:30	X	X	
13:32	X	X	X
13:33	X	X	
13:34	X	X	
13:35	X	X	
14:1		X	
14:1b	X	X	
14:3	X	X	X
14:8	X	X	
14:10	X	X	

Verse	Space	Ekthesis	Para-graphus
14:12		X	X
14:17		X	X
14:19		X	
14:20	X	X	
14:21c	X	X	
14:22	X	X	
14:23		X	
14:24	X	X	
14:26	X	X	
14:27	X	X	
14:27c	X	X	
14:29	X	X	
14:31	X	X	
14:32	X	X	
14:32b	X	X	
14:34	X	X	
14:35	X	X	
14:36d	X	X	
14:37	X	X	
14:38b		X	
14:40	X	X	
14:41f	X	X	
14:43	X	X	
14:44	X	X	
14:47	X	X	
14:48		X	
14:50	X	X	X
14:51	X	X	--
14:53	X	X	
14:54		X	
14:55	X	X	
14:57		X	
14:62	X	X	
14:63	X	X	
14:63b	X	X	
14:65	X	X	
14:66	X	X	X
14:68c		X	
14:72b		X	
15:1	X	X	
15:1a+	X	X	

Verse	Space	Ekthesis	Para-graphus
15:2	X	X	
15:2c	X	X	
15:6	X	X	X
15:7	X	X	
15:8		X	
15:11	X	X	
15:12	X	X	
15:15	X	X	
15:16	X	X	
15:20	X	X	
15:21	X	X	
15:22	X	X	
15:23	X	X	
15:24		X	
15:25	X	X	
15:26	X	X	
15:27	X	X	
15:27a+	X	X	
15:29	X	X	
15:31	X	X	
15:32b	X	X	
15:33	X	X	
15:34	X	X	
15:36	X	X	
15:37	X	X	--
15:38	X	X	
15:39	X	X	
15:40	X	X	
15:42	X	X	X
15:46	X	X	
15:47	X	X	
16:1	X	X	
16:2	X	X	
16:5	X	X	
16:6		X	
16:8		X	
16:9		X	X
16:15	X	X	
16:17		X	
16:19	X	X	



Table E.3: Paragraphing in Luke

Verse	Space	Ekthesis	Para-graphus
1:1	n/a	*	
1:5	X	X	
1:6	X	X	
1:8	X	X	
1:11	X	X	
1:13		X	
1:16	X	X	†
1:18	X	X	
1:19	X	X	
1:20	X	X	
1:21	X	X	
1:23	X	X	
1:24	X	X	
1:26	X	X	
1:28	C	C	
1:29	X	X	
1:34	X	X	
1:35		X	
1:36	X	X	
1:38		X	
1:39	X		
1:41	X	X	
1:41b	X	X	
1:42		X	
1:44	X	X	
1:46	X	X	
1:48		X	
1:51b	X	X	
1:53		X	
1:55a2	X	X	
1:56	X	X	
1:57	X	X	
1:59	X	X	
1:62	X	X	
1:64		X	
1:67	X	X	
1:69	X	X	
1:72	X	X	
1:76	X	X	
1:78b		X	
1:80	X	X	
2:1	X	X	†

Verse	Space	Ekthesis	Para-graphus
2:4	X	X	
2:6		X	
2:8	X	X	†
2:12	X	X	
2:15	X	X	
2:16	X	X	
2:19		X	
2:22	X	X	
2:25	X	X	+
2:27b		X	
2:29	X	X	—
2:32		X	
2:33	X	X	
2:34c		X	
2:36		X	+
2:39	X	X	
2:40	X	X	
2:41	X	X	
2:44	X	X	
2:47	X	X	
2:48	X	X	
2:49		X	
2:51	X	X	
2:52		X	
3:1		X	±
3:3	X	X	
3:4b	X	X	
3:7		X	
3:10		X	
3:12	X	X	
3:14	X	X	†
3:15	X	X	
3:16	X	X	
3:17	X	X	
3:19		X	
3:21	X	X	
3:23	X	X	
4:1	X	X	+
4:2c	X	X	
4:4	X	X	
4:5		X	
4:9	X	X	

Verse	Space	Ekthesis	Para-graphus
4:12	X	X	
4:14	X	X	
4:16	X	X	
4:18		X	
4:20	X	X	
4:22		X	
4:23	X	X	
4:24	X	X	
4:25		X	
4:27	X	X	
4:28	X	X	
4:30	X	X	
4:31	X	X	
4:32		X	
4:33	X	X	+
4:35		X	
4:37		X	
4:38	X	X	+
4:40	X	X	+
4:41	X	X	
4:42	X	X	
4:43	X	X	
5:1		X	+
5:4	X	X	
5:6	X	X	
5:8		X	
5:10b	X	X	
5:12	X	X	+
5:15	X	X	
5:16		X	
5:17		X	+
5:18	X	X	†
5:22		X	
5:27	X	X	+
5:29	X	X	
5:31	X	X	
5:34	X	X	
5:36		X	
5:37	X	X	
6:1	X	X	
6:3	X	X	
6:6		X	
6:9		X	

Verse	Space	Ekthesis	Para-graphus
6:12	X	X	
6:13	X	X	+
6:17	X	X	
6:20	X	X	
6:20b	X	X	+
6:21	X	X	
6:21b	X	X	
6:22	X	X	
6:24	X	X	
6:25	X	X	
6:27		X	
6:29		X	
6:31	X	X	
6:32	X	X	
6:33	X	X	
6:36		X	
6:37	X	X	
6:39		X	
6:40	X	X	
6:41	X	X	
6:42c	X	X	†
6:43	X	X	
6:44b	X	X	
6:45	X	X	
6:46	X	X	
6:47		X	
7:1	X	X	
7:2	X	X	+
7:4		X	
7:6b	X	X	
7:8	X	X	
7:10	X	X	
7:11		X	+
7:17	X	X	
7:18	X	X	+
7:21		X	
7:24	X	X	
7:27	X	X	
7:28		X	
7:29		X	
7:31	X	X	
7:33	X	X	
7:36		X	

Verse	Space	Ekthesis	Para-graphus
7:37	X	X	†
7:43	X	X	
7:50	X	X	
8:1	X	X	
8:2+	X	X	
8:4	X	X	+
8:8		X	
8:9	X	X	
8:10c	X	X	
8:11	X	X	
8:13	X	X	
8:14	X	X	
8:15	X	X	
8:16	X	X	
8:17	X	X	
8:18	X	X	
8:19		X	
8:21		X	
8:22		X	+
8:24	X	X	
8:25c		X	
8:26	X	X	+
8:28		X	
8:30	X	X	
8:33		X	
8:36	X	X	†
8:37		X	
8:38	X	X	
8:40	X	X	
8:41		X	+
8:43	X	X	+
8:47		X	
8:49	X	X	
8:50		X	
9:1	X	X	
9:5	X	X	
9:6	X	X	
9:7	X	X	+
9:9		X	
9:10		X	
9:10b	X	X	
9:12	X	X	±
9:14b	X	X	

Verse	Space	Ekthesis	Para-graphus
9:16	X	X	
9:18	X	X	+
9:20	X	X	
9:21		X	
9:23	X	X	
9:25	X	X	
9:27	X	X	
9:28	X	X	+
9:32	X	X	
9:33	X	X	
9:34	X	X	
9:36	X	X	
9:37		X	*
9:41	X	X	
9:43		X	
9:46		X	+
9:49	X	X	
9:51		X	
9:54	X	X	
9:56b		X	
9:57	X	X	+
9:59		X	
9:61	X	X	
10:1		X	+
10:2		X	
10:3	X	X	
10:4	X	X	
10:5		X	
10:6b		X	
10:8	X	X	
10:10		X	
10:13	X	X	
10:16		X	
10:17	X	X	
10:21	X	X	
10:22		X	
10:23		X	
10:25	X	X	+
10:27		X	
10:29	X	X	
10:30	X	X	+
10:32		X	
10:38	X	X	+

Verse	Space	Ekthesis	Para-graphus
10:41	X	X	
11:1		X	+
11:2	X	X	
11:5	X	X	
11:9		X	
11:11		X	
11:14	X	X	+
11:15	X	X	
11:16	X	X	
11:17	X	X	
11:22		X	
11:24	X	X	
11:26	X	X	
11:27	X	X	+
11:29	X	X	+
11:30		X	
11:32	X	X	
11:33	X	X	
11:34	X	X	
11:37	X	X	+
11:39		X	
11:40	X	X	
11:42	X	X	
11:43	X	X	
11:44	X	X	
11:45	X	X	
11:46		X	+
11:47	X	X	
11:49b	X	X	
11:52		X	
11:53	X	X	
12:1b		X	+
12:2	X	X	
12:4	X	X	
12:8	X	X	
12:10	X	X	
12:11	X	X	
12:13	X	X	+
12:15		X	
12:16		X	+
12:22		X	
12:24	X	X	
12:27	X	X	

Verse	Space	Ekthesis	Para-graphus
12:29	X	X	
12:32	X	X	
12:33	X	X	
12:34		X	
12:35		X	
12:37	X	X	
12:39		X	
12:40		X	
12:41		X	
12:45	X	X	
12:47	X	X	
12:49	X	X	
12:51		X	
12:54	X	X	
12:58		X	
13:1	X	X	+
13:2b	X	X	
13:4		X	
13:6	X	X	
13:7		X	
13:10	X	X	+
13:14		X	
13:15	X	X	
13:17		X	
13:18	X	X	+
13:20		X	
13:22	X	X	
13:23	X	X	+
13:25		X	
13:26	X	X	
13:28a+	X	.	†
13:30	X	X	
13:31	X	X	+
13:34	X	X	
14:1		X	+
14:2	X	X	
14:5	X	X	
14:7	X	X	+
14:10	X	X	
14:10c	X	X	
14:12	X	X	
14:13		X	
14:15	X	X	

Verse	Space	Ekthesis	Para-graphus
14:16	X	X	+
14:18	X		
14:18b		X	
14:19	X	X	
14:21	X	X	
14:21b		X	
14:23	X	X	
14:25	X	X	
14:28		X	+
14:31		X	
14:33	X	X	
14:34	X	X	
15:1	X	X	
15:3	X	X	†
15:7	X	X	
15:8	X	X	
15:10	X	X	
15:11	X	X	+
15:14	X	X	
15:17	X	X	
15:20b	X	X	
15:21b		X	
15:22	X	X	
15:25		X	
15:27	X	X	
15:29	X	X	
15:31	X	X	
16:1	X	X	
16:1b		X	+
16:3		X	
16:7		X	
16:8	X	X	
16:13	X	X	
16:14	X	X	
16:16	X	X	
16:17	X	X	
16:18		X	
16:19	X	X	+
16:22b	X	X	
16:25		X	
16:27	X	X	
16:29	X	X	
17:1		X	

Verse	Space	Ekthesis	Para-graphus
17:3	X	X	
17:4	X	X	
17:5	X	X	
17:6	X	X	
17:7		X	
17:11	X	X	+
17:17	X	X	
17:20	X	X	
17:22	X	X	
17:23	X	X	
17:24	X	X	
17:25	X	X	
17:26	X	X	
17:28	X	X	
17:31		X	
17:32	X	X	
17:34	X	X	
17:37		X	
18:1	X	X	
18:2b	X	X	+
18:4c	X	X	
18:6		X	
18:9	X	X	+
18:10		X	+
18:14c	X	X	
18:15	X	X	
18:16	X	X	
18:17	X	X	
18:18	X	X	+
18:22	X	X	
18:23		X	
18:29	X	X	
18:31	X	X	
18:34	X	X	
18:35	X	X	+
18:40	X	X	
19:1	X	X	+
19:8	X	X	
19:10	X	X	
19:11	X	X	
19:12	X	X	+
19:13	X	X	+
19:16	X	X	

Verse	Space	Ekthesis	Para-graphus
19:22		X	
19:26	X	X	
19:27		X	
19:28	X	X	
19:29	X	X	+
19:32		X	
19:37	X	X	
19:39	X	X	
19:41	X	X	
19:44b	X	X	
19:45		X	
19:47		X	
20:1	X	X	+
20:3		X	
20:9	X	X	+
20:13	X	X	
20:18		X	
20:19		X	
20:20		X	+
20:27		X	+
20:29		X	
20:34	X	X	
20:37		X	
20:39	X	X	
20:41	X	X	+
20:45	X	X	
20:47	X	X	
21:1			+
21:5	X	X	+
21:7	X	X	
21:10	X	X	
21:12	X	X	
21:14	X	X	
21:16	X	X	
21:20		X	
21:21	X		
21:23		X	
21:23b	X	X	
21:24	X	X	
21:25	X	X	
21:26b	X	X	
21:28	X	X	
21:29	X		

Verse	Space	Ekthesis	Para-graphus
21:32	X	X	
21:34		X	
21:36	X	X	
21:37	X	X	
22:1	X	X	+
22:2	X	X	
22:3	X	X	
22:4	X	X	
22:7		X	+
22:15	X	X	
22:16	X	X	
22:19	X	X	
22:20	X	X	
22:21	X	X	
22:23		X	
22:24	X	X	+
22:26	X	X	
22:29	X	X	
22:31	X	X	+
22:32b	X	X	
22:33	X	X	
22:35		X	
22:37	X	X	
22:38	X	X	
22:39	X	X	
22:40	X	X	
22:41		X	
22:42c		X	
22:45	X	X	
22:47		X	
22:48	X	X	
22:49	X	X	
22:51	X	X	
22:52	X	X	
22:54	X	X	
22:54c	X	X	
22:57	X	X	
22:60	X	X	
22:61b		X	
22:63	X	X	
22:66	X	X	
22:67c	X	X	
22:69	X	X	

Verse	Space	Ekthesis	Para-graphus
22:70c		X	
22:71	X	X	
23:1	X	X	
23:2		X	
23:3c		X	--
23:4	X	X	
23:5	X	X	
23:6	X	X	
23:8	X	X	
23:11	X	X	+
23:13	X	X	
23:14b		X	
23:14c	X	X	
23:18	X	X	
23:20	X	X	
23:22	X	X	
23:23	X	X	
23:24		X	
23:25b		X	
23:27	X	X	+
23:32		X	
23:33	X	X	
23:33a+	X	X	
23:34		X	
23:34d	X	X	
23:35b	X	X	
23:36	X	X	
23:38	X	X	
23:39	X	X	+

Verse	Space	Ekthesis	Para-graphus
23:40	X	X	
23:44		X	
23:45	X	X	
23:46	X	X	
23:47	X	X	
23:48		X	
23:50	X	X	+
23:53	X	X	
23:55	X	X	
23:56		X	
24:1	X	X	
24:4		X	
24:5	X	X	
24:9		X	
24:10	X	X	
24:12		X	
24:13		X	
24:18	X	X	+
24:21b	X	X	
24:22		X	
24:24		X	
24:25	X	X	
24:33	X	X	
24:36	X	X	
24:41	X	X	
24:44		X	
24:45	X	X	
24:51	X	X	

Table E.4: Paragraphing in John

Verse	Space	Ekthesis	Para-graphus
1:1	n/a	X	
1:6	X	X	
1:9	X	X	
1:14	X	X	
1:15	X	X	
1:16		X	
1:18	X	X	
1:23	X	X	
1:24	X	X	
1:26	X	X	
1:28	X	X	
1:29		X	
1:30	X	X	
1:32	X	X	
1:35	X	X	
1:38	X	X	
1:39	X	X	
1:40	X	X	
1:41	X	X	
1:43		X	
1:45	X	--	--
1:47	X	X	
1:48c		X	
1:50	X	X	
2:1	X	X	+
2:6	X	X	
2:9	X	X	
2:11	X	X	
2:12		X	
2:13		X	+
2:14	X	X	
2:17		X	
2:19	X	X	
2:23	X	X	
3:1		X	+
3:3	X	X	
3:4	X	X	
3:5	X	X	
3:6		X	
3:7		X	
3:9		X	
3:10	X	X	

Verse	Space	Ekthesis	Para-graphus
3:11	X	X	
3:14		X	
3:16	X	X	
3:18		X	
3:19	X	X	
3:20		X	--
3:22	X	X	
3:23	X	X	
3:24	X	X	
3:25	X	X	+
3:27	X	X	
3:28	X	X	
3:29	X	X	
3:35	X	X	
3:36	X	X	
4:1	X	X	
4:2	X	X	
4:5		X	+
4:6b		X	+
4:7b	X	X	
4:10	X	X	
4:12		X	
4:13	X	X	
4:15		X	
4:19	X	X	
4:21		X	
4:24	X	X	
4:30		X	
4:33	X	X	
4:35	X	X	
4:37	X	X	
4:42	X		†
4:43	X	X	
4:44	X	X	
4:45	X	X	
4:46	X	X	
4:46b		X	+
4:48		X	
4:52		X	
4:53	X	X	
4:54		X	
5:1	X	X	



Verse	Space	Ekthesis	Para-graphus
5:5	X	X	+
5:7	X	X	
5:8	X	X	
5:9d	X	X	
5:11	X	X	
5:13		X	
5:14		X	
5:15	X	X	
5:17		X	
5:19		X	
5:20		X	
5:22		X	
5:23b	X	X	
5:24	X	X	
5:26	X	X	
5:28		X	
5:30	X	X	
5:31		X	
5:33	X	X	
5:37b	X	X	
5:37c		X	
5:39	X	X	
5:43	X	X	--
5:44		X	
5:45	X	X	
6:1	X	X	
6:3		X	
6:4	X	X	
6:5		X	+
6:7		X	
6:10d	X	X	
6:11	X	X	
6:14		X	
6:15	X	X	
6:16	X	X	
6:19		X	†
6:22	X	X	
6:24		X	
6:26	X	X	
6:28	X	X	
6:30	X	X	
6:31		X	
6:32		X	

Verse	Space	Ekthesis	Para-graphus
6:34		X	
6:35c	X	X	
6:35d	X	X	
6:37		X	
6:39		X	
6:41	X	X	
6:43	X	X	
6:45	X	X	
6:45c	X	X	
6:47		X	
6:48	X		
6:49	X	X	
8:58	X	X	
9:1		X	+
9:3		X	
9:8		X	
9:11	X	X	
9:16		X	
9:20		X	
9:25	X	X	
9:30	X	X	
9:34	X	X	
9:35	X	X	
9:40		X	
10:1	X	X	
10:6		X	
10:7		X	
10:12	X	X	
10:14		X	
10:15	X	X	
10:15b	X	X	
10:16	X	X	
10:19	X	X	
10:21b	X	X	
10:22	X	X	
10:25	X	X	
10:27	X	X	
10:30	X	X	
10:35	X	X	
10:39		X	
10:41	X	X	
11:1	X	X	+

Verse	Space	Ekthesis	Para-graphus
11:3		X	
11:6		X	
11:9	X	X	
11:12	X	X	
11:14	X	X	
11:16		X	
11:18		X	
11:20	X	X	
11:24		X	
11:30	X	X	
11:32		X	
11:37	X	X	
11:41b		X	
11:45		X	
11:46	X	X	
11:49		X	
11:53	X	X	
11:55	X	X	
11:56	X		
12:2	X	X	+
12:4	X	X	+
12:7	X	X	
12:9	X	X	
12:12		X	+
12:14	X	X	+
12:16	X	X	
12:20	X	X	+
12:23	X	X	
12:24	X	X	
12:25	X	X	
12:26	X	X	
12:27	X	X	
12:30	X	X	
12:37	X	X	
12:39	X	X	
12:41	X	X	
12:42	X	X	
12:44	X	X	
12:46	X	X	
13:1	X	X	
13:2	X	X	+
13:3	X	X	
13:3b	X	X	

Verse	Space	Ekthesis	Para-graphus
13:6	X	X	
13:7	X	X	
13:8	X	X	
13:9		X	
13:10		X	
13:12	X	X	
13:13		X	
13:14		X	
13:16	X	X	
13:18	X	X	
13:20	X	X	
13:21		X	
13:22	X	X	
13:23	X	X	
13:26	X	X	
13:27	X	X	
13:27b	X	X	
13:31b		X	
13:33		X	
13:34	X	X	
13:36c	X	X	
13:38		X	--
14:1		X	
14:6	X	X	
14:8		X	
14:10		X	
14:12	X	X	
14:15	X	X	
14:19		X	
14:21b	X	X	
14:22	X	X	
14:24b		X	
14:25		X	
14:27	X	X	
14:28		X	
14:30	X	X	
14:31c	X	X	
15:4		X	
15:7	X	X	
15:8	X	X	
15:11	X	X	
15:12	X	X	
15:14	X	X	

Verse	Space	Ekthesis	Para-graphus
15:16	X	X	
15:17	X	X	
15:18	X	X	
15:20		X	
15:20b	X	X	
15:21		X	
15:22	X	X	
15:24	X	X	
15:26	X	X	+
16:1	X	X	--
16:4b	X	X	
16:9		X	
16:12	X	X	
16:15	X	X	
16:16		X	
16:17	X	X	
16:20	X	X	
16:22		X	
16:23b		X	
16:25	X	X	
16:29		X	
16:31	X	X	
16:33	X	X	
17:1		X	
17:5	X	X	
17:6	X	X	
17:9	X	X	
17:11d	X	X	
17:12		X	
17:13	X	X	
17:20		X	
17:24		X	
17:25	X	X	--
18:1		X	
18:2		X	
18:3	X	X	
18:4	X	X	
18:5e	X	X	
18:7		X	
18:10	X	X	
18:11	X	X	
18:12	X	X	
18:13	X	X	

Verse	Space	Ekthesis	Para-graphus
18:14		X	
18:15c	X	X	
18:16		X	
18:16b	X	X	
18:17		X	
18:18	X	X	
18:20		X	
18:21	X	X	
18:22	X	X	
18:23	X	X	
18:24	X	X	
18:25	X	X	
18:25d	X	X	†
18:27	X	X	
18:28	X	X	
18:28c	X	X	
18:33	X	X	
18:34	X	X	
18:36		X	
18:37		X	
18:37e	X	X	
18:38	--	X	
18:38c	X	X	
18:39	X	X	
18:40	X	X	
19:1	X	X	
19:4	X	X	
19:5	X	X	
19:6	X	X	
19:6c	X	X	
19:6e	X	X	
19:7		X	
19:8	X	X	
19:9d		X	
19:12b		X	
19:13	X	X	
19:14c	X	X	
19:15c	X	X	
19:16		X	
19:17	X	X	
19:18b	X	X	
19:19	X	X	
19:20	X	X	

Verse	Space	Ekthesis	Para-graphus
19:21	X	X	
19:23	X	X	
19:24	X	X	
19:25	X	X	
19:26	X	X	
19:28		X	
19:30c	X	X	
19:31		X	
19:33	X	X	
19:36		X	
19:38		X	+
19:39	X	X	
19:40	X	X	
19:41	X	X	
20:1	X	X	
20:2	X	X	
20:3	X	X	
20:4b	X		
20:10	X	X	
20:13	X	X	
20:15	X	X	
20:18	X	X	
20:19		X	
20:20b	X	X	
20:21	X	X	--
20:22	X	X	
20:24	X	X	

Verse	Space	Ekthesis	Para-graphus
20:25c	X	X	
20:26	X	X	
20:28	X	X	
21:1		X	
21:3	X	X	
21:5	X	X	
21:7		X	
21:9	X	X	
21:11	X	X	
21:12		X	
21:12c		X	
21:13	X	X	
21:14		X	
21:15		X	
21:15c	X	X	
21:15d	X	X	
21:16	X	X	
21:16e	X	X	
21:17	X	X	
21:17h	X	X	
21:18	X	X	
21:20	X	X	
21:22	X	X	
21:23	X	X	
21:24	X	X	
21:25		X	

## WORKS CITED

- Acker, Geoffrey Bernard. "The Codex Argenteus Upsaliensis: A Codicological Examination." PhD diss., University of Illinois, 1994.
- Ackerman, Robert W. and Gretchen P. Ackerman. *Sir Frederic Madden*. New York: Garland, 1979.
- Adrados, Francisco Rodríguez. *A History of the Greek Language*. Leiden: Brill, 2005.
- Ahn, Jeongseop. "Segmentation Features in New Testament Manuscripts: An Overlooked Resource for Editors and Translators." PhD diss., New Orleans Baptist Theological Seminary, 2012.
- Aland, Barbara, Kurt Aland, Johannes Karavidopoulos, Carlo M. Martini, and Bruce M. Metzger, eds. *Novum Testamentum Graece*. 27th ed. Stuttgart: Deutsche Bibelgesellschaft, 1993.
- Aland, Kurt, and Barbara Aland. *The Text of the New Testament*. Translated by Erroll F. Rhodes. Grand Rapids: Eerdmans, 1987.
- Arnold, A. N. "Manuscripts of the New Testament." In *The Baptist Quarterly*, Vol. 1, ed. Lucius E. Smith, 445–464. Philadelphia: American Baptist Publication Society, 1867.
- Baber, Henry Hervey. *Vetus Testamentum Graecum e Codice MS. Alexandrino: Prolegomena et Notae*. London: Richard Taylor, 1828.
- Bagnall, Roger S., ed. *The Oxford Handbook of Papyrology*. Oxford: Oxford University Press, 2009.
- Bischoff, Bernhard. *Latin Palaeography: Antiquity and the Middle Ages*. Translated by Dáibhí Ó Cróinín and David Ganz. Cambridge: Cambridge University Press, 1990.
- Black, David Allen. *Learn to Read New Testament Greek*. 3d ed. Nashville: B&H Publishing, 2009.
- Blades, William. *The Enemies of Books*. London: Trübner & Co., 1880.
- Blanchard, Alain. *Sigles et abréviations dans les papyrus documentaires grecs*. London: University of London, 1974.

- Blass, F., and A. Debrunner. *A Greek Grammar of the New Testament and Other Early Christian Literature*. Translated by Robert W. Funk. Chicago: University of Chicago Press, 1961.
- Blau, Ludwig. *Papyri und Talmud in gegenseitiger Beleuchtung*. Leipzig: Gustav Fock, 1913.
- Boyle, Leonard E. “‘Epistulae venerunt parum dulces’: the Place of Codicology in the Editing of Medieval Latin Texts.” In *Editing and Editors: a Retrospect*, ed. Richard Landon, 29–46. New York: AMS, 1988.
- Bozzolo, Carla and Ezio Ornato. *Pour une histoire du livre manuscrit au Moyen Age: trois essais de codicologie quantitative*. Paris: Éditions du Centre national de la recherche scientifique, 1983.
- Bristol, Lyle O. “New Testament Textual Criticism in the Eighteenth Century.” *Journal of Biblical Literature* 69, no. 2 (June 1950): 101–112.
- The British Library. *Summary Catalogue of Greek Manuscripts*. Vol. 1. London: The British Library, 1999.
- Brown, Michelle P., ed. *In the Beginning: Bibles Before the Year 1000*. Washington DC: Freer Gallery of Art & Arthur M. Sackler Gallery, 2006.
- Brown, Schuyler. “Concerning the Origin of the *Nomina Sacra*.” *Studia Papyrologica* 9 (1970): 7–19.
- Bucking, Scott. *Practice Makes Perfect: P. Cotsen-Princeton 1 and the Training of Scribes in Byzantine Egypt*. Los Angeles: Cotsen Occasional Press, 2011.
- Burkitt, F. C. “Codex ‘Alexandrinus’.” *Journal of Theological Studies* 11 (1909–1910): 603–606.
- Cahn, Walter. *Romanesque Bible Illumination*. Ithaca, NY: Cornell University Press, 1982.
- Calkins, Robert G. *Illuminated Books of the Middle Ages*. Ithaca, NY: Cornell University Press, 1983.
- Canart, Paul. “Le *Vaticanus graecus* 1209: notice paléographique et codicologique.” In *Le manuscrit B de la Bible (Vaticanus graecus 1209)*, ed. Patrick Andrist, 19–45. Lausanne: Éditions du Zèbre, 2009.
- Carley, James P., ed. *The Libraries of King Henry VIII*. Corpus of British Medieval Library Catalogues, 7. London: The British Library, 2000.
- Cavallo, Guglielmo. *Ricerche sulla maiuscola biblica*. Firenze: Le Monnier, 1967.
- Clemens, Raymond and Timothy Graham. *Introduction to Manuscript Studies*. Ithaca: Cornell University Press, 2007.
- The Codex Alexandrinus (Royal MS. 1 D. V-VIII) in Reduced Photographic Facsimile*. 4 vols. London: Trustees of the British Museum, 1909–1957.

- Colomesius, Paulus. *S. Clementis Epistolæ Duæ ad Corinthios*. London: Jacobi Adamson, 1695.
- Consani, Carlo. “La Koiné et les dialectes grecs dans la documentation linguistique et la réflexion métalinguistique des premiers siècles de notre ère.” In *La Koiné grecque antique*, ed. Claude Brixhe, 23–39. Nancy: Presses Universitaires de Nancy, 1993.
- Cowper, B. H. *Codex Alexandrinus. H KAINH ΔΙΑΘΗΚΗ. Novum Testamentum graece ex antiquissimo codice alexandrino a C. G. Woide olim descriptum: ad fidem ipsius codicis*. London: David Nutt and Williams & Norgate, 1860.
- Cramer, Maria. *Das christlich-koptische Ägypten, einst und heute*. Wiesbaden: Otto Harrassowitz, 1959.
- Criatore, Raffaella. *Gymnastics of the Mind: Greek Education in Hellenistic and Roman Egypt*. Princeton: Princeton University Press, 2001.
- Dahse, Johannes. “Zur Herkunft des alttestamentlichen Textes der Aldina.” *Zeitschrift für die alttestamentliche Wissenschaft* 29 (1909): 177–185.
- Dain, Alphonse. *Les Manuscrits*. Paris: Les Belles lettres, 1964.
- Diehl, Edith. *Bookbinding: Its Background and Technique*. New York: Dover, 1980.
- Dionysius Thrax. *Dionysii Tracis: Ars Grammatica*. Grammatici Graeci, ed. Gustav Uhlig, vol. 1. Leipzig: B. G. Teubner, 1883.
- Epp, Eldon J. “Decision Points in Past, Present, and Future New Testament Textual Criticism.” In *Studies in the Theory and Method of New Testament Textual Criticism*, ed. Eldon J. Epp and Gordon D. Fee, 17–44. Studies and Documents 45. Grand Rapids: Eerdmans, 1993.
- Facsimile of the Codex Alexandrinus*. 4 vols. London: Trustees of the British Museum, 1879–1883.
- Ferguson, George Wells. *Signs and Symbols in Christian Art*. London: Oxford University Press, 1961.
- Fisher, Celia. *Flowers in Medieval Manuscripts*. London: British Library, 2004.
- \_\_\_\_\_. *The Medieval Flower Book*. London: British Library, 2007.
- Foakes Jackson, F. J. and Kirsopp Lake. *The Beginnings of Christianity*. 5 vols. London: Macmillan, 1920–1933.
- Foot, Mirjam. “Bookbinding.” In *The Cambridge History of the Book in Britain*, vol. 4, eds. John Barnard, D. F. McKenzie and Maureen Bell, 620–631. Cambridge Histories Online. Cambridge: Cambridge University Press, 2002. DOI:10.1017/CHOL9780521661829.032.
- \_\_\_\_\_. *The Henry Davis Gift: A Collection of Bookbindings*. Vol. 1. London: The British Library, 1978.

- Fox, Adam. *John Mill and Richard Bentley*. Oxford: Basil Blackwell, 1954.
- Gacek, Adam. *Arabic Manuscripts: A Vademecum for Readers*. Leiden: Brill, 2009.
- Gallay, Paul. *Gregor von Nazianz: Briefe*. Berlin: Akademie-Verlag, 1969.
- Gamble, Harry Y. *Books and Readers in the Early Church*. New Haven: Yale University Press, 1995.
- Gardthausen, Viktor Emil. *Greichische Palaeographie*. Leipzig: B. G. Teubner, 1879.
- Georgius, Augustinus Antonius. *Fragmentum Evangelii S. Iohannis Graeco-Copto-Thebaicum Saeculi IV*. Rome: Antonium Fulgonium, 1789.
- Gignac, Francis Thomas. *A Grammar of the Greek Papyri of the Roman and Byzantine Periods*. Milan: Istituto editoriale cisalpino-La goliardica, 1976.
- Ginsberg, Christian D. *Introduction to the Massoretico-Critical Edition of the Hebrew Bible*. London: Trinitarian Bible Society, 1897.
- Goodacre, Mark. "How Reliable is the Story of the Nag Hammadi Discovery?" *Journal for the Study of the New Testament* 35, no. 4 (June 2013): 303-322.
- Goswell, Greg. "The Divisions of the Book of Daniel." In *The Impact of Unit Delimitation on Exegesis*, ed. Raymond de Hoop, Marjo C. A. Korpel, and Stanley E. Porter, 89-114. Leiden: Brill, 2009.
- \_\_\_\_\_. "Early Readers of the Gospels: The Kephalaia and Titloi of Codex Alexandrinus." *Journal of Greco-Roman Christianity and Judaism* 6 (2009): 134-174.
- Grabe, Joannes Ernestus. *Septuaginta Interpretum*. 4 vols. Oxford: Theatro Sheldoniano, 1707.
- Gullick, Michael. "Codicology." In *Grove Art Online*. *Oxford Art Online*. <http://www.oxfordartonline.com/subscriber/article/grove/art/T018410> (accessed November 3, 2012).
- Hagan, Hermann. *Grammatici Latini*. Leipzig: B. G. Teubner, 1870.
- Haines-Eitzen, Kim. *Guardians of Letters*. Oxford: Oxford University, 2000.
- Hall, Isaac H. "Notes on the Beirût Syriac Codex." *Journal of the Society of Biblical Literature and Exegesis* 2, no. 1 (June 1882): 3-26.
- Harris, J. Rendel. Review of F. H. A. Scrivener, *Introduction to the Criticism of the New Testament*. *American Journal of Philology* 5, no. 1 (1884): 96-99.
- Hatch, William Henry Paine. *Greek and Syrian Miniatures in Jerusalem*. Cambridge, MA: The Mediaeval Academy of America, 1931.
- \_\_\_\_\_. *The Principal Uncial Manuscripts of the New Testament*. Chicago: University of Chicago Press, 1939.



- Herbert, J. A. *Illuminated Manuscripts*. New York: Burt Franklin, 1911.
- Hernández, Juan. *Scribal Habits and Theological Influences in the Apocalypse: The Singular Readings of Sinaiticus, Alexandrinus, and Ephraemi*. Tübingen: Mohr Siebeck, 2006.
- Horrocks, Geoffrey. *Greek: A History of the Language and its Speakers*. London: Longman, 1997.
- Hulbert-Powell, C. L. *John James Wettstein 1693–1754*. London: Society for Promoting Christian Knowledge, 1937.
- Hurtado, Larry W. *The Earliest Christian Artifacts*. Grand Rapids: Eerdmans, 2006.
- \_\_\_\_\_. “The Origin of the *Nomina Sacra*: A Proposal.” *Journal of Biblical Literature* 117 (1998): 655–673.
- Ifrah, Georges. *The Universal History of Numbers*. Translated by David Bellos, E. F. Harding, Sophie Wood, and Ian Monk. New York: John Wiley and Sons, 2000.
- Isidore. *Isidori Hispalensis Episcopi Etymologiarum Sive Originum Libri XX*. Volume 1. Edited by W. M. Lindsay. Oxford: Clarendon, 1911.
- Jankowski, Stanislaw. “I ‘nomina sacra’ nei papiri die LXX (secoli II e III d. C.).” *Studia Papyrologica* 16 (1977): 81–116.
- Jebb, R. C. *Bentley*. London: Macmillan and Co, 1882.
- Johnson, William A. “The Function of the Paragraphus in Greek Literary Prose Texts.” *Zeitschrift für Papyrologie und Epigraphik* 100 (1994): 65–68.
- Jongkind, Dirk. *Scribal Habits of Codex Sinaiticus*. Piscataway, NJ: Gorgias Press, 2007.
- Jurgens, William A. *The Faith of the Early Fathers*. Vol. 1. Collegeville, MN: Liturgical Press, 1998.
- Karo, Georgius and Iohannes Lietzmann. *Catenarum graecarum catalogus*. Göttingen: Königlich Gesellschaft der Wissenschaften zu Göttingen, 1902.
- Kenyon, Frederic George. *Handbook to the Textual Criticism of the New Testament*. 2d ed. London: MacMillan and Co, 1912.
- \_\_\_\_\_. *Our Bible and the Ancient Manuscripts*. London: Eyre and Spottiswoode, 1958.
- \_\_\_\_\_. *The Palaeography of Greek Papyri*. Oxford: Oxford Clarendon Press, 1899.
- \_\_\_\_\_. *The Story of the Bible: A Popular Account of How it Came to Us*. London: John Murray, 1936.

- Korpel, Marjo C. A. "Introduction to the Series Pericope." In *Delimitation Criticism*, ed. Marjo Korpel and Josef Oesch, 1–50. Assen: Van Gorcum, 2000.
- Lake, Silva. *Family II and the Codex Alexandrinus: The Text According to Mark*. London: Christophers, 1937.
- Lattey, Cuthbert and F. C. Burkitt. "The Punctuation of New Testament Manuscripts." *Journal of Theological Studies* 29 (1928): 396–398.
- Law, Vivien and Ineke Sluiter, eds. *Dionysius Thrax and the Technē Grammatikē*. Münster: Nodus Publikationen, 1995.
- Leroy, Jules. *Les manuscrits coptes et coptes-arabes illustrés*. Paris: P. Geuthner, 1974.
- \_\_\_\_\_. *Les Types de réglure des manuscrits grecs*. Paris: Éditions du Centre national de la recherche scientifique, 1976.
- Luijendijk, AnneMarie. *Greetings in the Lord: Early Christians and the Oxyrhynchus Papyri*. Cambridge, MA: Harvard University Press, 2008.
- Madden, Frederic. 1855–1856. *MS Diaries of Sir Frederic Madden: Diaries of Sir Frederic Madden (1801–1873) 168–169*. Nineteenth Century Collections Online. Bodleian Library, University of Oxford (accessed November 25, 2012).
- Martin, Victor. *Papyrus Bodmer II: Evangile de Jean chap. 1–14*. Cologny-Genève: Bibliothèque Bodmer, 1956.
- Mayser, Edwin and Hans Schmoll. *Grammatik der griechischen Papyri aus der Ptolomäerzeit: mit Einschluss der gleichzeitigen Ostraka und der in Ägypten verfassten Inschriften*. Berlin: Walter de Gruyter, 1970.
- McArthur, Harvey K. "The Earliest Divisions of the Gospels." In *Studia Evangelica*, Vol 3,2, ed. F. L. Cross, 266–272. Berlin: Akademie Verlag, 1964.
- \_\_\_\_\_. "The Eusebian Sections and Canons." *The Catholic Biblical Quarterly* 27 (1965): 250–256.
- McFall, Leslie. "A Full Collation of the Four Gospels of Codex E Against the Universal (Byzantine) Text with a Collation of the Eusebian Apparatus in Sinaiticus, Alexandrinus, Codex E, and NA27, November, 2007." TMs (printed and bound copy). Tyndale House Library.
- McKendrick, Scot. "The Codex Alexandrinus: Or the Dangers of Being a Named Manuscript." In *The Bible as Book: The Transmission of the Greek Text*, ed. Scot McKendrick and Orlaith O'Sullivan, 1–16. London: The British Library and Oak Knoll Press, 2003.
- \_\_\_\_\_. *In a Monastery Library: Preserving Codex Sinaiticus and the Greek Written Heritage*. London: The British Library, 2006.

- McNamee, Kathleen. *Abbreviations in Greek Literary Papyri and Ostraca*. Chico, CA: Scholars Press, 1981.
- Mejía, Jorge. “Las Biblias Completas.” *Revista Teología* 44, no. 92 (April 2007): 77–104.
- Mercati, Giovanni. “Un’ Oscura Nota del Codice Alessandrino.” In *Mélanges Offerts a M. Émile Chatelain*, ed. Émile Chatelain, 79–82. Paris: Librairie Ancienne Honoré Champion, 1910.
- Metzger, Bruce M. *The Canon of the New Testament*. Oxford: Clarendon Press, 1987.
- \_\_\_\_\_. *Manuscripts of the Greek Bible*. New York: Oxford University Press, 1981.
- Metzger, Bruce M. and Bart D. Ehrman. *The Text of the New Testament*. 4th ed. New York: Oxford University, 2005.
- Meyer, Elizabeth A. *Legitimacy and Law in the Roman World: Tabulae in Roman Belief and Practice*. Cambridge: Cambridge University Press, 2008.
- Michaelis, John David. *Introduction to the New Testament*. 4th ed. Translated by Herbert Marsh, vol. 2. London: R. Gilbert, 1823.
- Middleton, Bernard C. *A History of English Craft Bookbinding Technique*. New York: Hafner, 1963.
- Millard, Alan R. “Ancient Abbreviations and the nomina sacra.” In *The Unbroken Reed: Studies in the Culture and Heritage of Ancient Egypt in Honour of A. F. Shore*, ed. Christopher Eyre, Anthony Leahy and Lisa Montagno Leahy, 221–226. London: Egypt Exploration Society, 1994.
- Miller, James A. “‘Let us sing to the Lord’: The Biblical Odes in the Codex Alexandrinus.” PhD diss., Marquette University, 2006.
- Montucla, Jean Etienne. *Histoire des mathématiques*. Paris: Ch. Ant. Jombert, 1758.
- Mosconas, T. D. *Catalogue of MSS of the Patriarchal Library of Alexandria*. Salt Lake City: University of Utah Press, 1965.
- Mussies, Gerard. *The Morphology of Koine Greek As Used in the Apocalypse of St. John: A Study in Bilingualism*. Leiden: Brill, 1971.
- Nordenfalk, Carl. “Canon Tables on Papyrus.” *Dumbarton Oaks Papers* 36 (1982): 29–38.
- \_\_\_\_\_. “The Eusebian Canon-Tables: Some Textual Problems.” *Journal of Theological Studies* 35 (1984): 96–104.
- O’Callaghan, José. “*Nomina Sacra*” in *Papyris Graecis Saeculi III Neotestamentariis*. Rome: Biblical Institute Press, 1970.

- Oikonomidēs, Al. N. *Abbreviations in Greek Inscriptions: Papyri, Manuscripts, and Early Printed Books*. Chicago: Ares Publishers, 1974.
- Oliver, Harold H. "The Epistle of Eusebius to Carpianus: Textual Tradition and Translation." *Novum Testamentum* 3, no. 1 (January 1959): 138–145.
- Osannus, Fridericus. *Anecdotum romanum de notis veterum criticis inprimis Aristarchi Homericis et Iliade Heliconia*. Geissen: I. Rickerum, 1851.
- Paap, A. H. R. E. *Nomina Sacra in the Greek Papyri of the First Five Centuries A.D.: The Sources and Some Deductions*. Papyrologica Lugduno-Batava 8. Leiden: Brill, 1959.
- Pächt, Otto. *Book Illumination in the Middle Ages: An Introduction*. Translated by Kay Davenport. London: Harvey Miller Publishers, 1986.
- Parker, D. C. *Codex Bezae: An Early Christian Manuscript and its Text*. Cambridge: Cambridge University Press, 1992.
- \_\_\_\_\_. *An Introduction to the New Testament Manuscripts and Their Texts*. Cambridge: Cambridge University, 2008.
- Parkes, M. B. *Pause and Effect: An Introduction to the History of Punctuation in the West*. Berkeley: University of California Press, 1993.
- Pattie, Thomas S. "Creation of the Great Codices." In *The Bible as Book: The Manuscript Tradition*, ed. John L. Sharpe III and Kimberly Van Kampen, 61–72. London: The British Library and Oak Knoll Press, 1998.
- Pearson, David. *English Bookbinding Styles 1450–1800*. New Castle, DE: The British Library and Oak Knoll Press, 2005.
- Phillips, C. A. "The Codex Sinaiticus and the Codex Alexandrinus." *Expository Times* 51 (1939–1940): 299–301.
- Porter, Stanley E. "Pericope Markers and the Paragraph." In *The Impact of Unit Delimitation on Exegesis*, ed. Raymond de Hoop, Marjo C. A. Korpel, and Stanley E. Porter, 174–195. Leiden: Brill, 2009.
- \_\_\_\_\_. "Pericope Markers in Some Early Greek New Testament Manuscripts." In *Layout Markers in Biblical Manuscripts and Ugaritic Tablets*, ed. Marjo Korpel and Josef Oesch, 161–175. Assen: Van Gorcum, 2005.
- \_\_\_\_\_. *Verbal Aspect in the Greek of the New Testament, with Reference to Tense and Mood*. New York: Peter Lang, 1989.
- Rahlfs, Alfred. *Septuaginta*. 2d ed. Stuttgart: Deutsche Bibelgesellschaft, 2006.
- \_\_\_\_\_. *Verzeichnis der griechischen Handschriften des Alten Testaments*. Edited by Detlef Fraenkel. Göttingen: Vandenhoeck and Ruprecht, 2004.
- Review of *Pamphlet on the Codex Alexandrinus*, by C. H. Hoole. *The Academy* 40 (July-December 1891).

- Reynolds, L. D. and N. G. Wilson. *Scribes and Scholars*. Oxford: Oxford University Press, 1968.
- Roberts, Colin H. *Manuscript, Society and Belief in Early Christian Egypt*. Oxford: Oxford University Press, 1979.
- Robinson, James M. "From the Cliff to Cairo: The Story of the Discoverers and Middlemen of the Nag Hammadi Codices." In *Colloque international sur les textes de Nag Hammadi (Québec, 22–25 août 1978)*, ed. Bernard Barc, 21–58. Bibliothèque copte de Nag Hammadi, Section "Études" 1. Québec: Les Presses de l'Université Laval, 1981.
- \_\_\_\_\_. *The Pachomian Monastic Library at the Chester Beatty Library and the Bibliothèque Bodmer*. Occasional Papers, Number 19. Claremont, CA: The Institute for Antiquity and Christianity, The Claremont Graduate School, 1990.
- \_\_\_\_\_. *The Story of the Bodmer Papyri*. Eugene, OR: Cascade, 2011.
- Robinson, Maurice A. and William G. Pierpont. *The New Testament in the Original Greek: Byzantine Textform 2005*. Southborough, MA: Chilton, 2005.
- Roe, Thomas, Sir. *The negotiations of Sir Thomas Roe, in his embassy to the Ottoman porte, from the year 1621 to 1628 inclusive: containing A great Variety of curious and important Matters, relating not only to the Affairs of the Turkish Empire, but also to those of the Other States of Europe, in that Period: his correspondences with the most illustrious Persons, for Dignity or Character; as with the Queen of Bohemia, Bethlem Gabor Prince of Transylvania, and other Potentates of different Nations, &c. And many useful and instructive particulars, as well in relation to Trade and Commerce, as to Subjects of Literature; as Antient Manuscripts, Coins, Inscriptions, and other Antiquities*. London: Samuel Richardson, at the expence of the Society for the Encouragement of Learning, 1740.
- Royse, James R. *Scribal Habits in Early Greek New Testament Papyri*. Leiden: Brill, 2008.
- Sanders, Henry Arthur. *The New Testament Manuscripts in the Freer Collection: Part I, the Washington Manuscript of the Four Gospels*. New York: MacMillan, 1912.
- Schmid, Ulrich. "Scribes and Variants: Sociology and Typology." In *Textual Variation: Theological and Social Tendencies?*, ed. H. A. G. Houghton and D. C. Parker, 1–23. Piscataway, NJ: Gorgias, 2008.
- Scholz, Johann Martin Augustin. *Novum Testamentum Graece*. Vol. 1. Liepzig: Friderici Fleischer, 1830.
- Scrivener, Frederick Henry. *A Plain Introduction to the Criticism of the New Testament for Use of Biblical Students*. 2d ed. Cambridge: Deighton, Bell, and Co, 1874.

- \_\_\_\_\_. *A Plain Introduction to the Criticism of the New Testament for the Use of Biblical Students*. 3d ed. Cambridge: Deighton, Bell, and Co, 1883.
- \_\_\_\_\_. *A Plain Introduction to the Criticism of the New Testament for the Use of Biblical Students*. 4th ed. 2 vols. Edited by Edward Miller. London: George Bell & Sons, 1894.
- \_\_\_\_\_. *Bezae Codex Cantabrigiensis*. London: Deighton, Bell, and Co, 1864.
- \_\_\_\_\_. *Six Lectures on the Text of the New Testament*. Cambridge: Deighton, Bell, and Co, 1875.
- Skeat, T. C. "The Codex Sinaiticus, the Codex Vaticanus, and Constantine." *Journal of Theological Studies* 50, no. 2 (1999): 583–624.
- \_\_\_\_\_. *The Collected Biblical Writings of T. C. Skeat*. Edited by J. K. Elliott. Leiden: Brill, 2004.
- \_\_\_\_\_. "The Provenance of the Codex Alexandrinus." *Journal of Theological Studies* 6 (1955): 233–235.
- Skeat, T. C. and H. J. M. Milne. *The Codex Sinaiticus and the Codex Alexandrinus with Six Illustrations*. London: Trustees of the British Museum, 1938.
- \_\_\_\_\_. *The Codex Sinaiticus and the Codex Alexandrinus*. 2d ed. London: Trustees of the British Museum, 1963.
- \_\_\_\_\_. *Scribes and Correctors of the Codex Sinaiticus*. London: British Museum, 1938.
- Smith, W. Andrew. "Transmission Peculiarities of the Eusebian Apparatus in Codex Alexandrinus." Paper presented at the annual meeting of the Society of Biblical Literature. Chicago, IL, November 18, 2012.
- \_\_\_\_\_. "Unit Delimitation in Codex Alexandrinus." Paper presented at the international meeting of the Society of Biblical Literature. London, July 6, 2011.
- Spinka, Matthew. "Acquisition of the Codex Alexandrinus by England." *Journal of Religion* 16, no. 1 (January 1936): 10–29.
- Spohn, M. Gottlieb Leberecht. *Caroli Godofredi Woidii Notitia Codicis Alexandrini cum variis eius lectionibus omnibus*. Leipzig: Sumtibus I. G. I. Breitkopfii, 1788.
- Stephen, Gwendolen. "The Coronis." *Scriptorium*, 13 (1959): 3–14.
- Teodorsson, Sven-Tage. *The Phonology of Ptolemaic Koine*. Göteborg: Acta Universitatis Gothoburgensis, 1977.
- Tischendorf, Constantin. *Vetus Testamentum Graece: Iuxta LXX Interpretes*. Leipzig: F. A. Brockhaus, 1836.

- Thompson, Edward Maunde. *An Introduction to Greek and Latin Palaeography*. Richmond: Tiger of the Stripe, 2008.
- Thompson, Herbert. *The Coptic Version of the Acts of the Apostles and the Pauline Epistles in the Sahidic Dialect*. Cambridge: Cambridge University Press, 1932.
- Tov, Emanuel. *Scribal Practices and Approaches Reflected in the Texts Found in the Judean Desert*. Leiden: Brill, 2004.
- \_\_\_\_\_. "Sense Divisions in the Qumran Texts, the Masoretic Text, and Ancient Translations of the Bible." In *The Interpretation of the Bible*, ed. Jože Krašovec, 121–146. Sheffield: Sheffield Academic Press, 1998.
- Traube, Ludwig. *Nomina Sacra: Versuch einer Geschichte der christlichen Kürzung*. München: C. H. Beck, 1907.
- Trobisch, David. *The First Edition of the New Testament*. Oxford: Oxford University Press, 2000.
- Tuckett, Christopher M. "'Nomina sacra': yes and no?" In *Biblical Canons*, ed. Jean-Marie Auwers and Henk Jan de Jonge, 431–458. Leuven: Leuven University Press, 2003.
- Turner, E. G. *Greek Manuscripts of the Ancient World*. Princeton: Princeton University Press, 1971.
- \_\_\_\_\_. *Greek Papyri: An Introduction*. Princeton: Princeton University Press, 1968.
- \_\_\_\_\_. *The Typology of the Early Codex*. Philadelphia: University of Pennsylvania, 1977.
- von Soden, Hermann Freiherr. *Die Schriften des Neuen Testaments*, vol. 1. Berlin: Alexander Duncker, 1902.
- Walton, Brian. *Biblia sacra polyglotta*. London: Thomas Roycroft, 1653.
- \_\_\_\_\_. *Briani Waltoni in Biblia polyglotta prolegomena*. Leipzig: Sumtibus Weygandianis, 1777.
- Wasserman, Tommy. "Papyrus 72 and the Bodmer Miscellaneous Codex." *New Testament Studies* 51, no. 1 (January 2005): 137–154.
- Wettstein, J. J. *H KAINH ΔΙΑΘΗΚΗ*. 2 vols. Amsterdam: Officina Dommeriana, 1751–1752.
- \_\_\_\_\_. *Prolegomena ad Novi Testamenti Graeci*. Amsterdam: R. & J. Wetstenios & G. Smith, 1730.
- Wicker, James R. "Pre-Constantinian *Nomina Sacra* in a Mosaic and Church Graffiti." *Southwestern Journal of Theology* 52, no. 1 (2009): 52–72.

Wilson, Nigel. "Greek Palaeography." In *Oxford Handbook of Byzantine Studies*, ed. Elizabeth Jeffreys, John Haldon, and Robin McCormack, 101–114. Oxford: Oxford University Press, 2008.

Wilson, R. McL., ed. *The Future of Coptic Studies*. Leiden: Brill, 1978.

Worp, Klaas A. "A Byzantine Loan of Money." *The Bulletin of the American Society of Papyrologists* 48 (2011): 71–77.

Wright, William Aldis. "A Note in the Codex Alexandrinus." *Academy* 7 (January/June 1875): 401.

Würthwein, Ernst. *The Text of the Old Testament*. 2d ed., revised and enlarged. Translated by Erroll F. Rhodes. Grand Rapids: Eerdmans, 1995.